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Observed and Estimated Total Bycatch of Salmon in U.S. West Coast Fisheries, 2002–16

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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Northwest Fisheries Science Center



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Note:

Due to the quantity of data they contain, Tables 2, 14, 16, 18, 22, 24, 25, 26, 27, 28, and 29 have been typeset on legal-sized pages. Printing them on regular, letter-sized paper may result in reduced legibility.

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Report Description

This processed report summarizes the observed and estimated total bycatch in terms of individual counts and weights for all salmon species observed in fisheries monitored by the West Coast Groundfish Observer Program (WCGOP), the At-Sea Hake Observer Program (A-SHOP), the Electronic Monitoring (EM) Program, and the Catch Monitor (CM) Program. Methods used follow the previous salmon report (Somers et al. 2015) and the most recent groundfish mortality report (Somers et al. 2016).

The Fisheries Observation Science (FOS) Program at the Northwest Fishery Science Center consists of two programs, the At-Sea Hake Observer Program (A-SHOP) and the West Coast Groundfish Observer Program (WCGOP). The A-SHOP observes the hake fleet that processes catch at sea, while the WCGOP observes a number of fleets that deliver catch shoreside for processing, including sectors that target and incidentally impact groundfish. Both programs place trained scientists on board commercial fishing vessels to observe and sample all catch; the WCGOP specifically focuses on at-sea discard estimates. Once landed shoreside, catch is sampled by the CM program; for vessels fishing under maximized or optimized retention, this sampling quantifies the majority of their bycatch. This report also includes fish ticket landings data from the Pacific Fishery Information Network (PacFIN).

Every year this report is updated to include the newest year of data, the most current data from the FOS and PacFIN for previous years, and the most recent data processing procedures. Data processing updates are described in the Groundfish Mortality report, which is available in draft form annually in the Pacific Fishery Management Council September Briefing Book and later in the year in final form via a Technical Memorandum. The tables in this processed report are also available as spreadsheets.¹

In this report, for each sector in which salmon bycatch occurred, we provide two tables, one showing observer or sampling coverage for all strata with observed effort and a second showing bycatch data for only those strata with salmon bycatch. Some tables include seasonal strata. For the shoreside-processed fisheries, these are defined as winter (January to April and November to December) or summer (May to October); for the at-sea processed fisheries, these are defined as spring (May 15, when the season opens, to June 30) or fall (July 1 to December 31). All weight units are in metric tons (mt), except for individual fish in biological data tables, which are in kilograms (kg).

All count values were rounded to an integer value using standard rounding rules in each table for presentation purposes; for that reason, a sum of the rounded values over rows within sector-level tables may not be equivalent to the value in the final summary tables. Similarly, 0 values represent cases where catch or salmon was present but the numeric value was less than the digits shown, while a double dash line represents strata where no salmon were observed. In cases where fewer than 3 vessels were active, data cannot be shown in order to maintain confidentiality; these strata are reported as asterisks (*). Additionally, the at symbol (@) represents strata for which the potential bootstrapping pool had less than 3 vessels and so could not be estimated: this represented less than 0.25 percent of fishing effort in regards to yearly landings. Finally, the hash symbol (#) represents cases where only a single haul with salmon was observed, so the SE calculation is not informative.

¹ https://www.nwfsc.noaa.gov/research/divisions/fram/observation/data_products/protected_species.cfm

Trends from 2002–16

We present trends in Chinook and Coho salmon bycatch, because troll fisheries target both salmon species. Bycatch in non-targeting fisheries has the potential to cause conflict between sectors. This has been the case for Chinook salmon, and high levels of bycatch in some years have created an on-going fisheries management challenge. We present data beginning in 2002, when the WCGOP began observing these fisheries. Chinook bycatch in the hake fishery as a whole has been volatile, with a high in 2014. In 2015 and 2016, bycatch was moderate compared to the historic record. Non-catch shares bycatch has been minimal across all years. After extremely high bycatch in 2002 and 2003, Chinook bycatch has remained relatively low in the shoreside non-hake fishery. 2014 saw the highest bycatch since 2005, and has decreased over 2015 and 2016. Moderate bycatch by tribal fisheries occurred from 2003 to 2005, but has since decreased and remained low since 2009.

Coho salmon bycatch in the hake fishery has been variable, with highs in 2007, and 2014. In other years, bycatch has been relatively low. Bycatch in the NCS and shoreside non-hake fisheries have remained at moderate levels across all years. Tribal bycatch was high from 2003–05, but has remained moderate across most years with little to no fishing effort in the mothership catcher-vessel sector from 2012–17. Zero bycatch from 2014 to 2016, largely due to extremely low fishing effort in recent years.

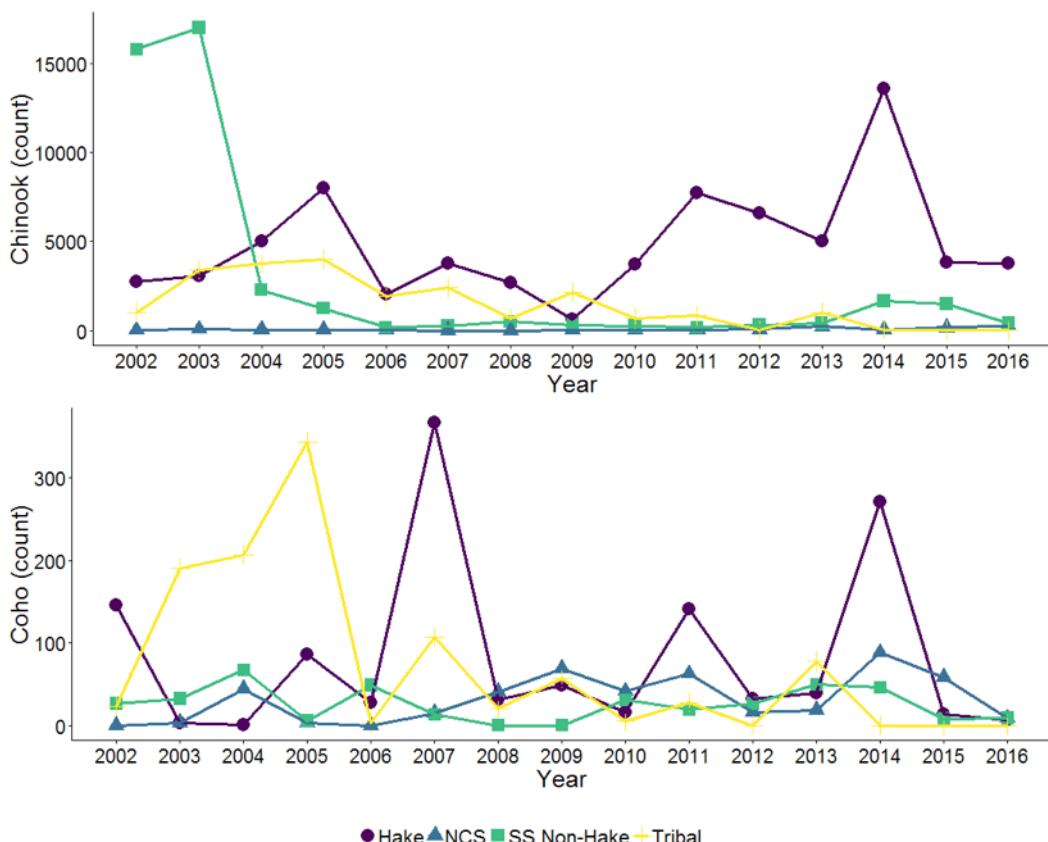


Figure 1. Trends from 2002–16 for Chinook and Coho salmon bycatch in fisheries observed by the A-SHOP, CM, and WCGOP. *Hake* consists of at-sea catcher processors, at-sea mothership catcher-vessels, and shoreside catcher vessels. NCS consists of non-catch shares exempted fishing permits, sablefish primary, nearshore, open access California halibut, and pink shrimp. SS Non-Hake consists of shoreside limited entry (LE) and catch shares (CS) bottom trawl, CS fixed gear, CS midwater rockfish, and LE California halibut. *Tribal* consists of tribal mothership catcher-vessels and tribal shoreside processors.

Table 1. Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, stratified by year, season, salmon management area, and depth interval for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2002	North of Cape Falcon, OR	Winter	0-125	150	905	13	46	248	52	21
2002	North of Cape Falcon, OR	Winter	125-250	235	994	13	35	153	24	16
2002	North of Cape Falcon, OR	Winter	250+	170	917	16	37	127	3	2
2002	North of Cape Falcon, OR	Summer	0-125	403	2326	20	137	828	50	6
2002	North of Cape Falcon, OR	Summer	125-250	9	382	3	4	7	--	--
2002	North of Cape Falcon, OR	Summer	250+	20	167	4	5	18	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	39	345	8	16	75	18	24
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	65	717	15	33	84	19	23
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	142	1050	17	38	142	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	104	837	11	49	258	5	2
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	16	205	7	11	24	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	52	343	11	14	65	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	21	233	7	16	50	18	36
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	30	430	12	19	42	19	45
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	196	1292	24	62	190	1	1
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	61	727	11	38	143	14	10
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	17	175	4	11	23	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	103	644	11	36	128	--	--
2002	South of Cape Mendocino, CA	Winter	0-125	69	491	10	26	63	8	13
2002	South of Cape Mendocino, CA	Winter	125-250	81	580	15	34	89	2	2
2002	South of Cape Mendocino, CA	Winter	250+	140	1097	19	38	123	--	--
2002	South of Cape Mendocino, CA	Summer	0-125	17	265	4	9	20	2	10
2002	South of Cape Mendocino, CA	Summer	125-250	109	626	23	41	76	3	4
2002	South of Cape Mendocino, CA	Summer	250+	253	1568	27	60	209	--	--
2003	North of Cape Falcon, OR	Winter	0-125	162	1075	11	35	203	33	16
2003	North of Cape Falcon, OR	Winter	125-250	85	971	10	17	58	9	16
2003	North of Cape Falcon, OR	Winter	250+	161	1041	16	25	110	--	--
2003	North of Cape Falcon, OR	Summer	0-125	65	1434	7	19	137	23	17

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2003	North of Cape Falcon, OR	Summer	125-250	128	781	11	25	112	--	--
2003	North of Cape Falcon, OR	Summer	250+	113	430	11	27	136	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	61	380	8	16	87	53	61
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	146	764	19	44	135	17	13
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	193	841	25	47	176	1	1
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	*	503	*	*	*	*	*
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	72	623	12	19	69	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	97	736	14	21	84	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	29	146	8	15	39	16	41
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	41	279	7	15	31	5	16
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	187	987	18	40	123	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	18	190	5	11	28	5	18
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	119	580	17	35	80	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	240	1432	23	59	190	--	--
2003	South of Cape Mendocino, CA	Winter	0-125	*	205	*	*	*	*	*
2003	South of Cape Mendocino, CA	Winter	125-250	39	448	5	13	31	--	--
2003	South of Cape Mendocino, CA	Winter	250+	142	1183	16	31	104	--	--
2003	South of Cape Mendocino, CA	Summer	0-125	49	350	10	55	155	11	7
2003	South of Cape Mendocino, CA	Summer	125-250	49	350	12	25	39	1	3
2003	South of Cape Mendocino, CA	Summer	250+	217	1661	21	55	153	--	--
2004	North of Cape Falcon, OR	Winter	0-125	134	309	8	55	271	44	16
2004	North of Cape Falcon, OR	Winter	125-250	355	1457	17	47	201	20	10
2004	North of Cape Falcon, OR	Winter	250+	397	1355	17	51	208	1	0
2004	North of Cape Falcon, OR	Summer	0-125	419	2785	16	119	802	22	3
2004	North of Cape Falcon, OR	Summer	125-250	153	805	11	18	73	1	1
2004	North of Cape Falcon, OR	Summer	250+	82	231	10	16	80	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	8	8	3	8	32	4	13
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	227	751	19	43	130	16	12
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	285	1147	22	45	149	1	1

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	34	443	5	19	98	9	9
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	200	946	18	40	154	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	219	637	21	38	153	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	@	*	*	*	*	*
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	109	274	8	23	59	14	24
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	233	647	11	34	111	1	1
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	70	395	6	19	70	3	4
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	97	426	12	20	44	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	164	773	13	31	101	--	--
2004	South of Cape Mendocino, CA	Winter	0-125	8	71	4	14	40	--	--
2004	South of Cape Mendocino, CA	Winter	125-250	87	365	14	36	96	2	2
2004	South of Cape Mendocino, CA	Winter	250+	407	1048	20	62	231	--	--
2004	South of Cape Mendocino, CA	Summer	0-125	69	187	8	35	107	2	2
2004	South of Cape Mendocino, CA	Summer	125-250	109	600	13	29	90	--	--
2004	South of Cape Mendocino, CA	Summer	250+	308	1415	17	51	179	--	--
2005	North of Cape Falcon, OR	Winter	0-125	122	519	7	41	187	1	1
2005	North of Cape Falcon, OR	Winter	125-250	271	1463	14	37	138	17	12
2005	North of Cape Falcon, OR	Winter	250+	379	1432	16	42	175	--	--
2005	North of Cape Falcon, OR	Summer	0-125	1016	4503	23	113	1166	--	--
2005	North of Cape Falcon, OR	Summer	125-250	85	317	12	25	85	--	--
2005	North of Cape Falcon, OR	Summer	250+	60	245	10	19	71	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	56	*	*	*	*	*
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	251	864	18	46	148	11	7
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	227	928	20	42	122	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	171	960	11	41	267	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	78	335	13	24	71	1	1
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	108	625	17	28	102	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	--	@	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	89	592	8	18	45	2	4

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	171	860	13	27	73	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	79	480	6	18	84	2	2
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	36	283	6	10	18	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	208	891	12	28	102	--	--
2005	South of Cape Mendocino, CA	Winter	0-125	5	50	3	9	21	--	--
2005	South of Cape Mendocino, CA	Winter	125-250	108	383	11	26	77	--	--
2005	South of Cape Mendocino, CA	Winter	250+	218	962	13	35	122	--	--
2005	South of Cape Mendocino, CA	Summer	0-125	86	336	5	51	204	1	0
2005	South of Cape Mendocino, CA	Summer	125-250	52	315	9	19	40	--	--
2005	South of Cape Mendocino, CA	Summer	250+	195	1011	11	29	123	--	--
2006	North of Cape Falcon, OR	Winter	0-125	55	212	6	28	151	2	1
2006	North of Cape Falcon, OR	Winter	125-250	174	1106	11	28	103	2	2
2006	North of Cape Falcon, OR	Winter	250+	211	1256	12	29	106	--	--
2006	North of Cape Falcon, OR	Summer	0-125	611	3928	18	115	966	1	0
2006	North of Cape Falcon, OR	Summer	125-250	101	525	11	20	55	--	--
2006	North of Cape Falcon, OR	Summer	250+	65	316	9	13	65	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	5	*	*	*	*	*
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	247	926	16	48	180	1	1
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	185	734	16	37	91	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	191	898	14	41	285	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	74	399	12	18	61	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	207	903	17	30	121	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	--	@	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	151	644	7	23	85	2	2
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	139	633	8	26	63	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	66	540	3	12	73	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	34	152	5	7	11	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	284	1170	11	35	137	--	--
2006	South of Cape Mendocino, CA	Winter	0-125	*	46	*	*	*	*	*

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2006	South of Cape Mendocino, CA	Winter	125-250	27	323	4	11	25	--	--
2006	South of Cape Mendocino, CA	Winter	250+	56	583	5	10	36	--	--
2006	South of Cape Mendocino, CA	Summer	0-125	61	256	5	48	175	--	--
2006	South of Cape Mendocino, CA	Summer	125-250	74	271	8	32	82	--	--
2006	South of Cape Mendocino, CA	Summer	250+	226	923	11	40	134	--	--
2007	North of Cape Falcon, OR	Winter	0-125	9	95	3	5	33	--	--
2007	North of Cape Falcon, OR	Winter	125-250	244	1585	13	31	116	6	5
2007	North of Cape Falcon, OR	Winter	250+	224	1802	13	30	140	--	--
2007	North of Cape Falcon, OR	Summer	0-125	221	1786	10	45	433	3	1
2007	North of Cape Falcon, OR	Summer	125-250	210	1466	13	32	156	--	--
2007	North of Cape Falcon, OR	Summer	250+	123	820	13	32	129	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	*	*	*	*	*
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	183	1053	16	33	106	2	2
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	262	1420	18	39	147	1	1
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	79	478	4	16	108	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	211	1172	24	40	138	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	237	807	22	44	171	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	--	19	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	85	656	9	24	66	1	2
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	178	1368	7	20	72	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	*	421	*	*	*	*	*
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	166	838	12	28	60	1	2
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	290	1192	15	43	147	--	--
2007	South of Cape Mendocino, CA	Winter	0-125	*	45	*	*	*	*	*
2007	South of Cape Mendocino, CA	Winter	125-250	92	474	5	23	68	--	--
2007	South of Cape Mendocino, CA	Winter	250+	150	408	5	21	75	--	--
2007	South of Cape Mendocino, CA	Summer	0-125	81	390	7	37	137	--	--
2007	South of Cape Mendocino, CA	Summer	125-250	102	525	9	30	75	--	--
2007	South of Cape Mendocino, CA	Summer	250+	109	740	11	33	84	--	--

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2008	North of Cape Falcon, OR	Winter	0-125	--	60	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	125-250	302	1936	12	38	153	6	4
2008	North of Cape Falcon, OR	Winter	250+	440	2560	13	41	213	--	--
2008	North of Cape Falcon, OR	Summer	0-125	196	936	8	30	331	--	--
2008	North of Cape Falcon, OR	Summer	125-250	478	1994	21	47	229	--	--
2008	North of Cape Falcon, OR	Summer	250+	376	1566	21	54	303	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	@	*	*	*	*	*
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	246	1246	17	44	154	9	6
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	316	1796	17	44	160	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	35	302	6	18	112	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	449	1489	29	82	349	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	308	1341	30	69	242	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	28	*	*	*	*	*
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	157	874	10	37	100	9	9
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	300	1733	12	53	158	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	--	155	--	--	--	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	249	753	17	37	85	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	339	1258	18	42	153	--	--
2008	South of Cape Mendocino, CA	Winter	0-125	*	94	*	*	*	*	*
2008	South of Cape Mendocino, CA	Winter	125-250	35	516	5	16	40	--	--
2008	South of Cape Mendocino, CA	Winter	250+	91	543	8	22	65	--	--
2008	South of Cape Mendocino, CA	Summer	0-125	102	319	11	46	208	1	0
2008	South of Cape Mendocino, CA	Summer	125-250	76	500	11	22	55	--	--
2008	South of Cape Mendocino, CA	Summer	250+	154	917	9	22	83	--	--
2009	North of Cape Falcon, OR	Winter	0-125	35	132	6	11	77	6	8
2009	North of Cape Falcon, OR	Winter	125-250	568	2773	18	57	222	2	1
2009	North of Cape Falcon, OR	Winter	250+	605	2832	21	71	323	--	--
2009	North of Cape Falcon, OR	Summer	0-125	478	1793	10	53	672	--	--
2009	North of Cape Falcon, OR	Summer	125-250	314	2018	13	41	143	--	--

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2009	North of Cape Falcon, OR	Summer	250+	278	1253	13	42	243	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	*	*	*	*	*
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	367	1329	41	93	258	7	3
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	771	2585	39	117	479	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	173	766	10	41	313	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	338	1168	21	58	257	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	411	1379	25	72	301	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	--	14	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	93	608	11	28	58	4	7
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	389	1518	16	57	217	1	0
2009	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	*	136	*	*	*	*	*
2009	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	126	865	11	32	76	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	353	1707	16	48	183	--	--
2009	South of Cape Mendocino, CA	Winter	0-125	6	72	4	5	16	1	6
2009	South of Cape Mendocino, CA	Winter	125-250	65	498	8	19	64	--	--
2009	South of Cape Mendocino, CA	Winter	250+	157	641	10	29	117	--	--
2009	South of Cape Mendocino, CA	Summer	0-125	78	189	9	38	156	9	6
2009	South of Cape Mendocino, CA	Summer	125-250	140	476	8	43	106	--	--
2009	South of Cape Mendocino, CA	Summer	250+	169	819	8	40	120	--	--
2010	North of Cape Falcon, OR	Winter	0-125	--	77	--	--	--	--	--
2010	North of Cape Falcon, OR	Winter	125-250	269	1989	12	27	78	--	--
2010	North of Cape Falcon, OR	Winter	250+	398	2625	12	36	196	--	--
2010	North of Cape Falcon, OR	Summer	0-125	215	1223	8	25	246	--	--
2010	North of Cape Falcon, OR	Summer	125-250	421	2150	11	34	152	--	--
2010	North of Cape Falcon, OR	Summer	250+	344	1249	15	43	276	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	--	9	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	138	1252	15	33	82	3	4
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	338	2175	18	42	220	1	0
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	82	317	5	26	171	--	--

Table 1 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, for the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Landings (mt)	Fleet	Observed Vessels	Observed Trips	Observed Hauls	Percent of Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	258	1059	22	46	153	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	388	1509	27	64	318	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	--	@	--	--	--	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	*	365	*	*	*	*	*
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	138	1384	7	18	72	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	*	12	*	*	*	*	*
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	201	817	17	40	64	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	464	1440	20	58	225	--	--
2010	South of Cape Mendocino, CA	Winter	0-125	28	99	3	15	69	--	--
2010	South of Cape Mendocino, CA	Winter	125-250	*	214	*	*	*	*	*
2010	South of Cape Mendocino, CA	Winter	250+	41	616	4	11	34	--	--
2010	South of Cape Mendocino, CA	Summer	0-125	32	248	6	17	62	--	--
2010	South of Cape Mendocino, CA	Summer	125-250	52	325	8	24	60	--	--
2010	South of Cape Mendocino, CA	Summer	250+	191	979	8	31	120	--	--

Table 2a. Observed and expanded Chinook salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook Weight Ratio SE	Expanded Chinook Catch Weight (mt)
2002	North of Cape Falcon, OR	Winter	0-125	150	905	137	0.9115	0.1405	825	0.25	0.0017	0.0003	1.54
2002	North of Cape Falcon, OR	Winter	125-250	235	994	74	0.3145	0.1002	313	0.14	0.0006	0.0002	0.58
2002	North of Cape Falcon, OR	Winter	250+	170	917	5	0.0294	0.0103	27	0.01	0.0000	0.0000	0.03
2002	North of Cape Falcon, OR	Summer	0-125	403	2326	116	0.2880	0.0415	670	0.28	0.0007	0.0001	1.62
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	39	345	141	3.5744	1.5171	1233	0.28	0.0070	0.0030	2.40
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	65	717	544	8.3368	5.0454	5979	0.87	0.0133	0.0078	9.56
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	104	837	7	0.0676	0.0103	57	0.02	0.0001	0.0000	0.12
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	21	233	181	8.4977	4.1606	1981	0.30	0.0139	0.0066	3.24
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	30	430	194	6.4031	3.7182	2755	0.29	0.0097	0.0050	4.16
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	196	1292	6	0.0307	0.0027	40	0.01	0.0001	0.0000	0.07
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	61	727	106	1.7323	0.6386	1259	0.16	0.0026	0.0008	1.92
2002	South of Cape Mendocino, CA	Winter	0-125	69	491	21	0.3036	0.1062	149	0.07	0.0010	0.0003	0.49
2002	South of Cape Mendocino, CA	Winter	125-250	81	580	2	0.0247	0.0061	14	0.01	0.0001	0.0000	0.04
2002	South of Cape Mendocino, CA	Summer	0-125	17	265	3	0.1815	0.0735	48	0.00	0.0002	0.0001	0.05
2002	South of Cape Mendocino, CA	Summer	125-250	109	626	6	0.0551	0.0245	34	0.01	0.0001	0.0000	0.06
2003	North of Cape Falcon, OR	Winter	0-125	162	1075	98	0.6043	0.1134	650	0.23	0.0014	0.0003	1.51
2003	North of Cape Falcon, OR	Winter	125-250	85	971	29	0.3404	0.1187	331	0.09	0.0010	0.0004	1.00
2003	North of Cape Falcon, OR	Summer	0-125	65	1434	121	1.8746	0.7594	2687	0.19	0.0029	0.0012	4.21
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	61	380	1234	20.1721	7.5333	7660	2.15	0.0351	0.0125	13.31
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	146	764	569	3.9073	1.6996	2986	1.03	0.0071	0.0033	5.42
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	193	841	8	0.0414	0.0048	35	0.02	0.0001	0.0000	0.07
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	*	503	*	0.1856	0.0003	93	*	0.0004	0.0000	0.19
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	29	146	146	5.0112	1.7649	730	0.27	0.0094	0.0035	1.37
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	41	279	184	4.4694	2.3028	1249	0.29	0.0071	0.0035	1.99
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	18	190	23	1.2920	0.6285	246	0.03	0.0017	0.0007	0.33
2003	South of Cape Mendocino, CA	Winter	0-125	*	205	*	0.2302	0.0001	47	*	0.0008	0.0000	0.16
2003	South of Cape Mendocino, CA	Summer	0-125	49	350	20	0.4083	0.1265	143	0.04	0.0008	0.0002	0.29
2003	South of Cape Mendocino, CA	Summer	125-250	49	350	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Winter	0-125	134	309	146	1.0910	0.2908	337	0.23	0.0017	0.0003	0.53

Table 2a (continued). Observed and expanded Chinook salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook SE	Expanded Chinook Weight Ratio
2004	North of Cape Falcon, OR	Winter	125-250	355	1457	36	0.1015	0.0198	148	0.09	0.0003	0.0001	0.39
2004	North of Cape Falcon, OR	Winter	250+	397	1355	2	0.0050	0.0005	7	0.00	0.0000	0.0000	0.01
2004	North of Cape Falcon, OR	Summer	0-125	419	2785	33	0.0790	0.0132	220	0.10	0.0002	0.0001	0.69
2004	North of Cape Falcon, OR	Summer	125-250	153	805	1	0.0065	0.0011	5	0.00	0.0000	0.0000	0.00
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	8	8	7	0.8707	0.3131	7	0.01	0.0008	0.0003	0.01
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	227	751	94	0.4141	0.1086	311	0.18	0.0008	0.0002	0.61
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	285	1147	1	0.0035	0.0004	4	0.00	0.0000	0.0000	0.01
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	34	443	36	1.0690	0.7511	474	0.07	0.0020	0.0012	0.91
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	5	*	3.6290	0.0060	20	*	0.0067	0.0000	0.04
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	109	274	80	0.7349	0.2520	201	0.17	0.0015	0.0005	0.42
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	233	647	1	0.0043	0.0005	3	0.01	0.0000	0.0000	0.01
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	70	395	3	0.0427	0.0066	17	0.01	0.0001	0.0000	0.04
2004	South of Cape Mendocino, CA	Winter	125-250	87	365	2	0.0229	0.0031	8	0.01	0.0001	0.0000	0.03
2004	South of Cape Mendocino, CA	Summer	0-125	69	187	4	0.0577	0.0067	11	0.01	0.0002	0.0000	0.04
2005	North of Cape Falcon, OR	Winter	0-125	122	519	1	0.0082	0.0008	4	0.00	0.0000	0.0000	0.00
2005	North of Cape Falcon, OR	Winter	125-250	271	1463	108	0.3979	0.1298	582	0.20	0.0007	0.0002	1.08
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	56	*	0.1982	0.0002	11	*	0.0004	0.0000	0.02
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	251	864	28	0.1114	0.0311	96	0.06	0.0002	0.0001	0.21
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	78	335	3	0.0383	0.0058	13	0.01	0.0001	0.0000	0.03
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	89	592	14	0.1579	0.0330	93	0.04	0.0004	0.0001	0.24
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	79	480	2	0.0255	0.0037	12	0.01	0.0001	0.0000	0.03
2005	South of Cape Mendocino, CA	Summer	0-125	86	336	1	0.0116	0.0011	4	0.00	0.0000	0.0000	0.01
2006	North of Cape Falcon, OR	Winter	0-125	55	212	2	0.0365	0.0045	8	0.00	0.0001	0.0000	0.01
2006	North of Cape Falcon, OR	Winter	125-250	174	1106	5	0.0311	0.0095	34	0.01	0.0000	0.0000	0.04
2006	North of Cape Falcon, OR	Summer	0-125	611	3928	1	0.0016	0.0001	6	0.00	0.0000	0.0000	0.01
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	5	*	0.1280	0.0000	1	*	0.0004	0.0000	0.00
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	247	926	1	0.0040	0.0004	4	0.00	0.0000	0.0000	0.02
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	151	644	2	0.0133	0.0018	9	0.00	0.0000	0.0000	0.02
2007	North of Cape Falcon, OR	Winter	125-250	244	1585	12	0.0493	0.0191	78	0.02	0.0001	0.0000	0.13

Table 2a (continued). Observed and expanded Chinook salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook SE	Expanded Chinook Weight Ratio
2007	North of Cape Falcon, OR	Summer	0-125	221	1786	6	0.0271	0.0066	48	0.01	0.0001	0.0000	0.10
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	183	1053	8	0.0437	0.0054	46	0.02	0.0001	0.0000	0.09
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	262	1420	1	0.0038	0.0004	5	0.00	0.0000	0.0000	0.02
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	85	656	1	0.0118	0.0018	8	0.00	0.0000	0.0000	0.01
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	166	838	1	0.0060	0.0009	5	0.00	0.0000	0.0000	0.01
2008	North of Cape Falcon, OR	Winter	0-125	--	60	--	1.7128	0.0020	102	--	0.0010	0.0000	0.06
2008	North of Cape Falcon, OR	Winter	125-250	302	1936	11	0.0364	0.0096	71	0.02	0.0001	0.0000	0.14
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	2	*	0.1356	0.0002	0	*	0.0003	0.0000	0.00
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	246	1246	24	0.0975	0.0283	122	0.05	0.0002	0.0001	0.26
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	157	874	20	0.1273	0.0398	111	0.04	0.0003	0.0001	0.22
2008	South of Cape Mendocino, CA	Winter	0-125	*	94	*	0.0124	0.0001	1	*	0.0000	0.0000	0.00
2008	South of Cape Mendocino, CA	Summer	0-125	102	319	4	0.0392	0.0039	13	0.01	0.0001	0.0000	0.02
2009	North of Cape Falcon, OR	Winter	0-125	35	132	39	1.1283	0.4808	149	0.02	0.0006	0.0002	0.09
2009	North of Cape Falcon, OR	Winter	125-250	568	2773	2	0.0035	0.0003	10	0.00	0.0000	0.0000	0.02
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	*	0.1508	0.0003	2	*	0.0003	0.0000	0.00
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	367	1329	14	0.0381	0.0106	51	0.04	0.0001	0.0000	0.14
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	93	608	5	0.0539	0.0127	33	0.01	0.0001	0.0000	0.06
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	389	1518	2	0.0051	0.0005	8	0.00	0.0000	0.0000	0.01
2009	South of Cape Mendocino, CA	Winter	0-125	6	72	1	0.1657	0.0972	12	0.00	0.0006	0.0003	0.04
2009	South of Cape Mendocino, CA	Summer	0-125	78	189	18	0.2303	0.0850	44	0.04	0.0005	0.0002	0.10
2010	North of Cape Falcon, OR	Winter	0-125	--	77	--	2.3693	0.0024	182	--	0.0014	0.0000	0.10
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	--	9	--	0.1285	0.0004	1	--	0.0002	0.0000	0.00
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	138	1252	4	0.0290	0.0071	36	0.01	0.0001	0.0000	0.09
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	338	2175	--	--	--	--	--	--	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	*	365	*	0.0461	0.0000	17	*	0.0001	0.0000	0.04

Table 2b. Observed and expanded chum salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Landings (mt)	Observed Chum Count (Individuals)	Observed Bycatch Chum Ratio	Observed Bycatch Chum Ratio SE	Expanded Chum Catch (Individuals)	Observed Chum Weight (mt)	Observed Bycatch Chum Weight Ratio	Observed Bycatch Chum Weight Ratio SE	Expanded Chum Catch Weight (mt)
2002	North of Cape Falcon, OR	Winter	0-125	150	905	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Winter	125-250	235	994	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Winter	250+	170	917	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Summer	0-125	403	2326	1	0.0025	0.0001	6	0.00	0.0000	0.0000	0.02
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	39	345	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	65	717	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	104	837	1	0.0097	0.0009	8	0.00	0.0000	0.0000	0.03
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	21	233	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	30	430	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	196	1292	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	61	727	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	0-125	69	491	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	125-250	81	580	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	0-125	17	265	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	125-250	109	626	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	0-125	162	1075	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	125-250	85	971	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Summer	0-125	65	1434	1	0.0155	0.0019	22	0.00	0.0000	0.0000	0.06
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	61	380	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	146	764	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	193	841	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	*	503	*	0.0179	0.0000	9	*	0.0001	0.0000	0.04
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	29	146	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	41	279	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	18	190	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Winter	0-125	*	205	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	0-125	49	350	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	125-250	49	350	1	0.0202	0.0047	7	0.00	0.0001	0.0000	0.03
2004	North of Cape Falcon, OR	Winter	0-125	134	309	--	--	--	--	--	--	--	--

Table 2b (continued). Observed and expanded chum salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Chum Count (Individuals)	Observed Bycatch Chum Ratio	Observed Bycatch Chum Ratio SE	Expanded Chum Catch (Individuals)	Observed Chum Weight (mt)	Observed Bycatch Chum Weight Ratio	Observed Bycatch Chum Weight Ratio SE	Expanded Chum Catch Weight (mt)
2004	North of Cape Falcon, OR	Winter	125-250	355	1457	1	0.0028	0.0002	4	0.00	0.0000	0.0000	0.01
2004	North of Cape Falcon, OR	Winter	250+	397	1355	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Summer	0-125	419	2785	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Summer	125-250	153	805	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	8	8	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	227	751	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	285	1147	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	34	443	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	5	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	109	274	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	233	647	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	70	395	--	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Winter	125-250	87	365	--	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Summer	0-125	69	187	--	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	0-125	122	519	--	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	125-250	271	1463	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	56	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	251	864	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	78	335	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	89	592	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	79	480	--	--	--	--	--	--	--	--
2005	South of Cape Mendocino, CA	Summer	0-125	86	336	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	0-125	55	212	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	125-250	174	1106	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Summer	0-125	611	3928	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	5	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	247	926	--	--	--	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	151	644	--	--	--	--	--	--	--	--
2007	North of Cape Falcon, OR	Winter	125-250	244	1585	--	--	--	--	--	--	--	--

Table 2b (continued). Observed and expanded chum salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet		Observed Chum Count (Individuals)	Observed Bycatch Chum Ratio	Observed Bycatch Chum Ratio SE	Expanded Chum Catch (Individuals)	Observed Chum Weight (mt)	Observed Bycatch Chum Weight Ratio	Observed Bycatch Chum Weight SE	Expanded Chum Catch Weight (mt)
					Groundfish Landings (mt)	Chum Catch (mt)								
2007	North of Cape Falcon, OR	Summer	0-125	221	1786	--	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	183	1053	--	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	262	1420	--	--	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	85	656	--	--	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	166	838	--	--	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	0-125	--	60	--	--	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	125-250	302	1936	--	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	2	--	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	246	1246	--	--	--	--	--	--	--	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	157	874	--	--	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Winter	0-125	*	94	--	--	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Summer	0-125	102	319	--	--	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	0-125	35	132	--	--	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	125-250	568	2773	--	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	--	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	367	1329	--	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	93	608	--	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	389	1518	--	--	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Winter	0-125	6	72	--	--	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Summer	0-125	78	189	--	--	--	--	--	--	--	--	--
2010	North of Cape Falcon, OR	Winter	0-125	--	77	--	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	--	9	--	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	138	1252	--	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	338	2175	--	--	--	--	--	--	--	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	*	365	--	--	--	--	--	--	--	--	--

Table 2c. Observed and expanded coho salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Coho Count (Individuals)		Observed Bycatch Ratio	Observed Coho Bycatch Ratio SE	Expanded Coho Catch (Individuals)	Observed Coho Weight (mt)	Observed Bycatch Weight Ratio	Observed Coho Weight Ratio SE	Bycatch Coho Weight Ratio	Expanded Coho Catch Weight (mt)
						Coho	Bycatch								
2002	North of Cape Falcon, OR	Winter	0-125	150	905	1	--	0.0067	0.0008	6	0.00	0.0000	0.0000	0.0000	0.01
2002	North of Cape Falcon, OR	Winter	125-250	235	994	--	--	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Winter	250+	170	917	--	--	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Summer	0-125	403	2326	2	--	0.0050	0.0003	12	0.00	0.0000	0.0000	0.0000	0.00
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	39	345	1	--	0.0253	0.0047	9	0.00	0.0000	0.0000	0.0000	0.01
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	65	717	--	--	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	104	837	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	21	233	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	30	430	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	196	1292	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	61	727	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	0-125	69	491	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	125-250	81	580	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	0-125	17	265	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	125-250	109	626	--	--	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	0-125	162	1075	--	--	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	125-250	85	971	--	--	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Summer	0-125	65	1434	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	61	380	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	146	764	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	193	841	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	*	503	*	--	0.0121	0.0000	6	*	0.0000	0.0000	0.0000	0.02
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	29	146	1	--	0.0343	0.0076	5	0.00	0.0001	0.0000	0.0000	0.01
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	41	279	--	--	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	18	190	2	--	0.1124	0.0252	21	0.00	0.0002	0.0000	0.0000	0.04
2003	South of Cape Mendocino, CA	Winter	0-125	*	205	--	--	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	0-125	49	350	--	--	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	125-250	49	350	--	--	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Winter	0-125	134	309	--	--	--	--	--	--	--	--	--	--

Table 2c (continued). Observed and expanded coho salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet				Observed Coho Catch (Individuals)	Observed Bycatch Ratio	Observed Coho Bycatch Ratio SE	Expanded Coho Catch (Individuals)	Observed Coho Weight (mt)	Observed Bycatch Weight Ratio	Observed Coho Weight Ratio SE	Observed Coho Catch Weight (mt)
					Groundfish Landings (mt)	Observed Coho Count (Individuals)	Observed Bycatch Coho Ratio	Observed Coho Bycatch SE								
2004	North of Cape Falcon, OR	Winter	125-250	355	1457	1	0.0028	0.0002	4	0.00	0.0000	0.0000	0.01	--	--	--
2004	North of Cape Falcon, OR	Winter	250+	397	1355	--	--	--	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Summer	0-125	419	2785	1	0.0024	0.0001	7	0.00	0.0000	0.0000	0.02	--	--	--
2004	North of Cape Falcon, OR	Summer	125-250	153	805	--	--	--	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	8	8	--	--	--	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	227	751	4	0.0176	0.0065	13	0.01	0.0000	0.0000	0.02	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	285	1147	--	--	--	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	34	443	3	0.0971	0.0217	43	0.01	0.0004	0.0001	0.16	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	5	*	0.0203	0.0001	0	*	0.0000	0.0000	0.00	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	109	274	--	--	--	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	233	647	--	--	--	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	70	395	--	--	--	--	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Winter	125-250	87	365	--	--	--	--	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Summer	0-125	69	187	--	--	--	--	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	0-125	122	519	--	--	--	--	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	125-250	271	1463	1	0.0037	0.0004	5	0.00	0.0000	0.0000	0.01	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	56	--	--	--	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	251	864	--	--	--	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	78	335	--	--	--	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	89	592	--	--	--	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	79	480	--	--	--	--	--	--	--	--	--	--	--
2005	South of Cape Mendocino, CA	Summer	0-125	86	336	--	--	--	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	0-125	55	212	--	--	--	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	125-250	174	1106	--	--	--	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Summer	0-125	611	3928	--	--	--	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	5	--	--	--	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	247	926	--	--	--	--	--	--	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	151	644	--	--	--	--	--	--	--	--	--	--	--
2007	North of Cape Falcon, OR	Winter	125-250	244	1585	2	0.0082	0.0011	13	0.00	0.0000	0.0000	0.02	--	--	--

Table 2c (continued). Observed and expanded coho salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Coho Bycatch			Expanded Coho Catch (Individuals)	Observed Coho Weight (mt)	Observed Bycatch Coho Weight Ratio	Observed Bycatch Coho Weight Ratio SE	Observed Expanded Coho Catch Weight (mt)
						Coho Count (Individuals)	Bycatch Ratio	Coho Bycatch Ratio SE					
2007	North of Cape Falcon, OR	Summer	0-125	221	1786	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	183	1053	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	262	1420	--	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	85	656	--	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	166	838	--	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	0-125	--	60	--	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	125-250	302	1936	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	2	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	246	1246	--	--	--	--	--	--	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	157	874	--	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Winter	0-125	*	94	--	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Summer	0-125	102	319	--	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	0-125	35	132	--	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	125-250	568	2773	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	367	1329	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	93	608	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	389	1518	--	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Winter	0-125	6	72	--	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Summer	0-125	78	189	--	--	--	--	--	--	--	--
2010	North of Cape Falcon, OR	Winter	0-125	--	77	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	--	9	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	138	1252	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	338	2175	4	0.0118	0.0012	26	0.01	0.0000	0.0000	0.07
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	*	365	*	0.0139	0.0000	5	*	0.0000	0.0000	0.00

Table 2d. Observed and expanded pink salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet					Observed Pink Count (Individuals)	Observed Bycatch Pink Ratio	Observed Bycatch Pink Ratio SE	Expanded Pink Catch (Individuals)	Observed Pink Weight (mt)	Observed Bycatch Pink Weight Ratio	Observed Bycatch Pink Weight Ratio SE	Expanded Pink Catch Weight (mt)
				Observed Groundfish Catch (mt)	Groundfish Landings (mt)	Bycatch Pink	Bycatch Pink	Bycatch Pink								
2002	North of Cape Falcon, OR	Winter	0-125	150	905	--	--	--	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Winter	125-250	235	994	--	--	--	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Winter	250+	170	917	--	--	--	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Summer	0-125	403	2326	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	39	345	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	65	717	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	104	837	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	21	233	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	30	430	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	196	1292	--	--	--	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	61	727	--	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	0-125	69	491	--	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	125-250	81	580	--	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	0-125	17	265	--	--	--	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	125-250	109	626	--	--	--	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	0-125	162	1075	--	--	--	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	125-250	85	971	--	--	--	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Summer	0-125	65	1434	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	61	380	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	146	764	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	193	841	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	*	503	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	29	146	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	41	279	--	--	--	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	18	190	--	--	--	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Winter	0-125	*	205	--	--	--	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	0-125	49	350	--	--	--	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	125-250	49	350	--	--	--	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Winter	0-125	134	309	--	--	--	--	--	--	--	--	--	--	--

Table 2d (continued). Observed and expanded pink salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet					Observed Pink Weight (mt)	Observed Bycatch Pink Weight Ratio SE	Observed Bycatch Pink Weight Ratio SE	Observed Expanded Pink Catch Weight (mt)
				Observed Groundfish Catch (mt)	Groundfish Landings (mt)	Observed Pink Count (Individuals)	Observed Bycatch Pink Ratio	Observed Bycatch Pink Ratio SE				
2004	North of Cape Falcon, OR	Winter	125-250	355	1457	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Winter	250+	397	1355	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Summer	0-125	419	2785	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Summer	125-250	153	805	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	8	8	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	227	751	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	285	1147	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	34	443	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	5	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	109	274	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	233	647	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	70	395	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Winter	125-250	87	365	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Summer	0-125	69	187	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	0-125	122	519	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	125-250	271	1463	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	56	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	251	864	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	78	335	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	89	592	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	79	480	--	--	--	--	--	--	--
2005	South of Cape Mendocino, CA	Summer	0-125	86	336	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	0-125	55	212	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	125-250	174	1106	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Summer	0-125	611	3928	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	5	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	247	926	--	--	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	151	644	--	--	--	--	--	--	--
2007	North of Cape Falcon, OR	Winter	125-250	244	1585	--	--	--	--	--	--	--

Table 2d (continued). Observed and expanded pink salmon bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet					Observed Pink Weight (mt)	Observed Bycatch Pink Weight Ratio	Observed Bycatch Pink Weight Ratio SE	Expanded Pink Catch Weight (mt)
				Observed Groundfish Catch (mt)	Groundfish Landings (mt)	Observed Pink Count (Individuals)	Observed Bycatch Pink Ratio	Observed Bycatch Pink Ratio SE				
2007	North of Cape Falcon, OR	Summer	0-125	221	1786	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	183	1053	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	262	1420	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	85	656	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	166	838	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	0-125	--	60	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	125-250	302	1936	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	2	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	246	1246	--	--	--	--	--	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	157	874	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Winter	0-125	*	94	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Summer	0-125	102	319	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	0-125	35	132	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	125-250	568	2773	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	367	1329	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	93	608	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	389	1518	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Winter	0-125	6	72	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Summer	0-125	78	189	1	0.0128	0.0016	2	0.00	0.0000	0.0000
2010	North of Cape Falcon, OR	Winter	0-125	--	77	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	--	9	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	138	1252	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	338	2175	--	--	--	--	--	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	*	365	--	--	--	--	--	--	--

Table 2e. Observed and expanded unspecified bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Unspecified Count (Individuals)	Observed Bycatch Unspecified Ratio	Observed Bycatch Unspecified Ratio SE	Expanded Unspecified Catch (Individuals)	Observed Unspecified Weight (mt)	Observed Bycatch Unspecified Weight Ratio	Observed Bycatch Unspecified Weight Ratio SE	Expanded Unspecified Catch Weight (mt)
2002	North of Cape Falcon, OR	Winter	0-125	150	905	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Winter	125-250	235	994	1	0.0042	0.0004	4	0.00	0.0000	0.0000	0.01
2002	North of Cape Falcon, OR	Winter	250+	170	917	--	--	--	--	--	--	--	--
2002	North of Cape Falcon, OR	Summer	0-125	403	2326	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	39	345	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	65	717	--	--	--	--	--	--	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	104	837	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	21	233	1	0.0469	0.0094	11	0.00	0.0001	0.0000	0.03
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	30	430	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	196	1292	--	--	--	--	--	--	--	--
2002	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	61	727	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	0-125	69	491	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Winter	125-250	81	580	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	0-125	17	265	--	--	--	--	--	--	--	--
2002	South of Cape Mendocino, CA	Summer	125-250	109	626	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	0-125	162	1075	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Winter	125-250	85	971	--	--	--	--	--	--	--	--
2003	North of Cape Falcon, OR	Summer	0-125	65	1434	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	61	380	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	146	764	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	193	841	--	--	--	--	--	--	--	--
2003	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	*	503	*	0.0074	0.0000	4	*	0.0000	0.0000	0.01
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	29	146	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	41	279	--	--	--	--	--	--	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	18	190	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Winter	0-125	*	205	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	0-125	49	350	--	--	--	--	--	--	--	--
2003	South of Cape Mendocino, CA	Summer	125-250	49	350	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Winter	0-125	134	309	2	0.0149	0.0011	5	0.00	0.0000	0.0000	0.00

Table 2e (continued). Observed and expanded unspecified bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Unspecified Count (Individuals)	Observed Bycatch Unspecified Ratio	Observed Bycatch Unspecified Ratio SE	Expanded Unspecified Catch (Individuals)	Observed Unspecified Weight (mt)	Observed Bycatch Unspecified Weight Ratio	Observed Bycatch Unspecified Weight Ratio SE	Expanded Unspecified Catch Weight (mt)
2004	North of Cape Falcon, OR	Winter	125-250	355	1457	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Winter	250+	397	1355	--	--	--	--	--	--	--	--
2004	North of Cape Falcon, OR	Summer	0-125	419	2785	1	0.0024	0.0001	7	0.00	0.0000	0.0000	0.03
2004	North of Cape Falcon, OR	Summer	125-250	153	805	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	8	8	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	227	751	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	285	1147	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	34	443	2	0.0594	0.0095	26	0.01	0.0002	0.0000	0.07
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-125	*	5	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	109	274	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	233	647	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	70	395	--	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Winter	125-250	87	365	--	--	--	--	--	--	--	--
2004	South of Cape Mendocino, CA	Summer	0-125	69	187	--	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	0-125	122	519	--	--	--	--	--	--	--	--
2005	North of Cape Falcon, OR	Winter	125-250	271	1463	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	56	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	251	864	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	78	335	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	89	592	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	79	480	--	--	--	--	--	--	--	--
2005	South of Cape Mendocino, CA	Summer	0-125	86	336	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	0-125	55	212	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Winter	125-250	174	1106	--	--	--	--	--	--	--	--
2006	North of Cape Falcon, OR	Summer	0-125	611	3928	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	5	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	247	926	--	--	--	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	151	644	--	--	--	--	--	--	--	--
2007	North of Cape Falcon, OR	Winter	125-250	244	1585	--	--	--	--	--	--	--	--

Table 2e (continued). Observed and expanded unspecified bycatch in the LE trawl fishery.

Year	Area	Season	Depth Interval (fth)	Observed Groundfish Catch (mt)	Fleet Groundfish Landings (mt)	Observed Unspecified Count (Individuals)	Observed Bycatch Unspecified Ratio	Observed Bycatch Unspecified Ratio SE	Expanded Unspecified Catch (Individuals)	Observed Unspecified Weight (mt)	Observed Bycatch Unspecified Weight Ratio	Observed Bycatch Unspecified Weight Ratio SE	Expanded Unspecified Catch Weight (mt)
2007	North of Cape Falcon, OR	Summer	0-125	221	1786	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	183	1053	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	262	1420	--	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	85	656	--	--	--	--	--	--	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	166	838	--	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	0-125	--	60	--	--	--	--	--	--	--	--
2008	North of Cape Falcon, OR	Winter	125-250	302	1936	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	2	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	246	1246	--	--	--	--	--	--	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	157	874	--	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Winter	0-125	*	94	--	--	--	--	--	--	--	--
2008	South of Cape Mendocino, CA	Summer	0-125	102	319	--	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	0-125	35	132	--	--	--	--	--	--	--	--
2009	North of Cape Falcon, OR	Winter	125-250	568	2773	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	*	16	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	367	1329	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	93	608	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	389	1518	--	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Winter	0-125	6	72	--	--	--	--	--	--	--	--
2009	South of Cape Mendocino, CA	Summer	0-125	78	189	--	--	--	--	--	--	--	--
2010	North of Cape Falcon, OR	Winter	0-125	--	77	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	--	9	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	138	1252	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	338	2175	--	--	--	--	--	--	--	--
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	*	365	--	--	--	--	--	--	--	--

Table 3. Observed vessels, trips, hauls, catch, and salmon interactions, as well as total fleet landings, stratified by year and season for the LE CA halibut fishery. All fishing occurred south of Cape Mendocino. To preserve confidentiality: 2010 data are reported in Tables 7 and 8, combined with OA CA halibut; 2011 and 2013 data are reported in Table 16, combined with IFQ Bottom Trawl; 2012 data cannot be reported; no fishing effort in LE CHLB has occurred since 2013.

Year	Season	Observed California Halibut Catch (mt)	Fleet California Halibut Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2002	All Year	4	105	7	19	52	8	15
2003	Winter	13	62	6	33	107	8	7
2003	Summer	6	44	8	40	100	9	9
2004	Winter	15	80	3	21	95	25	26
2004	Summer	17	56	6	25	76	4	5
2005	Winter	11	131	6	28	101	16	16
2005	Summer	20	57	5	46	134	9	7
2006	Winter	11	81	7	44	143	6	4
2006	Summer	3	39	5	34	81	2	2
2007	Winter	3	14	3	13	29	4	14
2007	Summer	2	5	4	27	52	2	4
2008	Winter	10	34	4	35	110	12	11
2008	Summer	0.1	2	3	5	8	--	--
2009	All Year	3	47	3	12	29	--	--

Table 4a. Observed and expanded Chinook salmon bycatch in the LE CHLB fishery.

Year	Season	Fleet		Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook Weight Ratio SE	Expanded Chinook Catch Weight (mt)
		Observed California Halibut Catch (mt)	California Halibut Landings (mt)								
2002	All Year	4	105	13	3.6214	0.8655	381	0.01	0.0035	0.0009	0.37
2003	Winter	13	62	9	0.6987	0.1108	43	0.01	0.0008	0.0002	0.05
2003	Summer	6	44	11	1.7706	0.3368	77	0.01	0.0017	0.0004	0.08
2004	Winter	15	80	88	5.9910	1.8110	479	0.13	0.0086	0.0019	0.68
2004	Summer	17	56	4	0.2381	0.0345	13	0.02	0.0014	0.0003	0.08
2005	Winter	11	131	31	2.8884	0.5035	380	0.06	0.0053	0.0009	0.70
2005	Summer	20	57	15	0.7583	0.1682	44	0.03	0.0017	0.0004	0.10
2006	Winter	11	81	13	1.1740	0.4310	95	0.02	0.0016	0.0006	0.13
2006	Summer	3	39	1	0.3112	0.0473	12	0.00	0.0011	0.0002	0.04
2007	Winter	3	14	11	3.6632	1.6022	52	0.02	0.0070	0.0030	0.10
2007	Summer	2	5	5	2.0454	0.9490	9	0.03	0.0126	0.0089	0.06
2008	Winter	10	34	21	2.2093	0.4964	75	0.05	0.0050	0.0012	0.17

Table 4b. Observed and expanded coho salmon bycatch in the LE CHLB fishery.

Year	Season	Fleet				Observed Bycatch Coho Ratio	Observed Coho Ratio SE	Expanded Coho Catch (Individuals)	Observed Coho Weight (mt)	Observed Bycatch Ratio	Observed Bycatch Coho Weight Ratio SE	Observed Bycatch Coho Weight Expanded Coho Catch Weight (mt)
		Observed California Halibut Catch (mt)	California Halibut Landings (mt)	Observed Coho Count (Individuals)	Observed Bycatch Coho Ratio							
2002	All Year	4	105	--	--	--	--	--	--	--	--	--
2003	Winter	13	62	--	--	--	--	--	--	--	--	--
2003	Summer	6	44	--	--	--	--	--	--	--	--	--
2004	Winter	15	80	--	--	--	--	--	--	--	--	--
2004	Summer	17	56	--	--	--	--	--	--	--	--	--
2005	Winter	11	131	--	--	--	--	--	--	--	--	--
2005	Summer	20	57	--	--	--	--	--	--	--	--	--
2006	Winter	11	81	--	--	--	--	--	--	--	--	--
2006	Summer	3	39	4	1.2449	0.1890	48	0.02	0.0050	0.0008	0.1929	
2007	Winter	3	14	--	--	--	--	--	--	--	--	--
2007	Summer	2	5	--	--	--	--	--	--	--	--	--
2008	Winter	10	34	--	--	--	--	--	--	--	--	--

Table 4c. Observed and expanded unspecified bycatch in the LE CHLB fishery.

Year	Season	Fleet			Observed Bycatch Unspecified Ratio	Observed Bycatch Unspecified Ratio SE	Expanded Unspecified Catch (Individuals)	Observed Unspecified Weight (mt)	Observed Bycatch Unspecified Weight Ratio	Observed Bycatch Unspecified Weight Ratio SE	Observed Bycatch Unspecified Weight (mt)
		Observed California Halibut Catch (mt)	California Halibut Landings (mt)	Observed Unspecified Count (Individuals)							
2002	All Year	4	105	5	1.3929	0.2428	147	0.00	0.0007	0.0001	0.07
2003	Winter	13	62	--	--	--	--	--	--	--	--
2003	Summer	6	44	--	--	--	--	--	--	--	--
2004	Winter	15	80	--	--	--	--	--	--	--	--
2004	Summer	17	56	--	--	--	--	--	--	--	--
2005	Winter	11	131	--	--	--	--	--	--	--	--
2005	Summer	20	57	--	--	--	--	--	--	--	--
2006	Winter	11	81	--	--	--	--	--	--	--	--
2006	Summer	3	39	--	--	--	--	--	--	--	--
2007	Winter	3	14	--	--	--	--	--	--	--	--
2007	Summer	2	5	--	--	--	--	--	--	--	--
2008	Winter	10	34	--	--	--	--	--	--	--	--

Table 5. Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, stratified by year for the OA CA halibut fishery. Note that all fishing in this fishery occurred south of Cape Mendocino. Strata not listed were not observed.

Year	Observed California Halibut Catch (mt)	Fleet California Halibut Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon
2003	2	26	5	18	110	--
2004	5	71	4	53	244	--
2005	7	65	6	59	362	--
2007	3	39	8	48	227	--
2008	3	52	7	49	199	--
2009	1	82	3	9	30	--
2011	12	80	13	48	204	5
2012	4	56	7	27	78	--
2013	4	69	5	29	81	4
2014	18	81	6	51	145	1
2015	31	92	8	100	339	25
2016	27	90	11	114	500	23

Table 6a. Observed and expanded Chinook salmon bycatch in the OA CHLB fishery.

Year	Observed California Halibut Catch (mt)	Fleet California Halibut Landings (mt)	Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook Weight Ratio SE	Expanded Chinook Catch Weight (mt)
2011	12	80	7	0.5624	0.1581	45	0.00	0.0003	0.0000	0.02
2013	4	69	6	1.3938	0.4470	96	0.00	0.0006	0.0001	0.04
2014	18	81	1	0.0551	0.0057	4	0.00	0.0000	0.0000	0.00
2015	31	92	44	1.4372	0.2117	132	0.10	0.0032	0.0006	0.29
2016	27	90	57	2.0858	0.3297	187	0.16	0.0059	0.0010	0.53

Table 6b. Observed and expanded unspecified bycatch in the OA CHLB fishery.

Year	Observed California Halibut Catch (mt)	Fleet California Halibut Landings (mt)	Observed Unspecified Count (Individuals)	Observed Bycatch Unspecified Ratio	Observed Bycatch Unspecified Ratio SE	Expanded Unspecified Catch (Individuals)	Observed Unspecified Weight (mt)	Observed Bycatch Unspecified Weight Ratio	Observed Bycatch Unspecified Weight Ratio SE	Expanded Unspecified Catch Weight (mt)
2011	12	80	--	--	--	--	--	--	--	--
2013	4	69	--	--	--	--	--	--	--	--
2014	18	81	--	--	--	--	--	--	--	--
2015	31	92	3	0.0980	0.0077	9	0.00	0.0001	0.0000	0.01
2016	27	90	--	--	--	--	--	--	--	--

Table 7. Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, for the combined LE & OA CA halibut fishery, combined in 2010 to maintain confidentiality. Note that all fishing in this fishery occurred south of Cape Mendocino.

Season	Fleet California		Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
	Observed California Halibut Catch (mt)	Halibut Landings (mt)					
Winter	7	61	4	22	87	2	2
Summer	2	63	4	21	66	--	--

Table 8. Observed and expanded salmon bycatch in the combined LE & OA CHLB fishery in 2010.

Season	Observed California Halibut Catch (mt)	Fleet California Halibut Landings (mt)	Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook Weight Ratio SE	Expanded Chinook Catch Weight (mt)
	7	61	2	0.2851	0.0482	17	0.00	0.0002	0.0001	0.01

Table 9. Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, stratified by year and area for the LE sablefish primary fishery, using hook-and-line gear. Strata not listed were not observed.

Year	Area	Observed Sablefish Catch (mt)	Fleet Sablefish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2002	North of Cape Falcon, OR	103	455	9	24	224	--	--
2002	Cape Falcon, OR to Cape Blanco, OR	71	182	12	32	114	--	--
2002	South of Cape Blanco, OR	17	151	7	14	53	--	--
2003	North of Cape Falcon, OR	158	502	9	28	231	1	0
2003	Cape Falcon, OR to Cape Blanco, OR	41	293	3	8	70	--	--
2003	South of Cape Blanco, OR	24	240	4	13	50	--	--
2004	North of Cape Falcon, OR	95	786	9	19	204	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	65	333	4	16	81	--	--
2004	South of Cape Blanco, OR	20	190	5	11	41	--	--
2005	North of Cape Falcon, OR	254	722	11	34	422	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	123	357	11	33	142	1	1
2005	South of Cape Blanco, OR	105	213	10	38	114	--	--
2006	North of Cape Falcon, OR	178	838	13	47	362	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	95	304	5	13	81	--	--
2006	South of Cape Blanco, OR	23	235	3	8	27	--	--
2007	North of Cape Falcon, OR	163	605	11	38	397	1	0
2007	Cape Falcon, OR to Cape Blanco, OR	106	288	8	18	78	--	--
2007	South of Cape Blanco, OR	30	187	6	19	42	--	--
2008	North of Cape Falcon, OR	117	574	9	34	282	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	175	336	9	35	207	--	--
2008	South of Cape Blanco, OR	46	184	5	13	51	--	--
2009	North of Cape Falcon, OR	43	705	4	13	179	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	36	471	4	9	75	--	--
2009	South of Cape Blanco, OR	18	271	4	24	33	--	--
2010	North of Cape Falcon, OR	155	564	7	41	396	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	156	478	9	61	279	--	--
2010	South of Cape Blanco, OR	35	262	11	46	87	--	--
2011	North of Cape Falcon, OR	99	457	9	31	375	--	--

Table 9 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, for the LE sablefish primary fishery.

Year	Area	Observed Sablefish Catch (mt)	Fleet Sablefish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2011	Cape Falcon, OR to Cape Blanco, OR	70	416	10	30	161	--	--
2011	South of Cape Blanco, OR	72	280	11	44	137	--	--
2012	North of Cape Falcon, OR	76	364	7	21	177	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	97	398	7	43	231	--	--
2012	South of Cape Blanco, OR	66	313	5	31	124	--	--
2013	North of Cape Falcon, OR	68	291	6	12	155	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	14	241	6	9	48	--	--
2013	South of Cape Blanco, OR	84	220	11	38	150	--	--
2014	North of Cape Falcon, OR	84	307	5	14	281	7	2
2014	Cape Falcon, OR to Cape Blanco, OR	45	227	4	13	63	--	--
2014	South of Cape Blanco, OR	74	211	9	58	151	--	--
2015	North of Cape Falcon, OR	124	369	9	28	310	1	0
2015	Cape Falcon, OR to Cape Blanco, OR	158	312	12	34	182	--	--
2015	South of Cape Blanco, OR	110	258	10	37	140	--	--
2016	North of Cape Falcon, OR	89	403	5	16	278	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	137	333	8	33	219	--	--
2016	South of Cape Blanco, OR	112	290	11	48	174	--	--

Table 10a. Observed and expanded coho bycatch in the LE sablefish primary fishery using hook-and-line gear.

Year	Area			Observed		Expanded		Observed		Observed		Expanded	
		Observed Sablefish Catch (mt)	Fleet Sablefish Landings (mt)	Coho Count (Indivi- duals)	Observed Bycatch Coho Ratio	Observed Bycatch Coho Ratio SE	Coho Catch (Indivi- duals)	Observed Coho Weight (mt)	Bycatch Coho Weight Ratio	Coho Weight Ratio SE	Bycatch Coho Weight Ratio	Coho Weight Ratio SE	Coho Catch Weight (mt)
2003	North of Cape Falcon, OR	158	502	1	0.0063	0.0006	3	0.00	0.0000	0.0000	0.0000	0.01	
2005	Cape Falcon, OR to Cape Blanco, OR	123	357	1	0.0081	0.0008	3	0.00	0.0000	0.0000	0.0000	0.01	
2007	North of Cape Falcon, OR	163	605	1	0.0062	0.0004	4	0.00	0.0000	0.0000	0.0000	0.01	
2014	North of Cape Falcon, OR	84	307	6	0.0715	0.0060	22	0.02	0.0002	0.0000	0.0000	0.08	
2015	North of Cape Falcon, OR	124	369	1	0.0080	0.0006	3	0.00	0.0000	0.0000	0.0000	0.01	

Table 10b. Observed and expanded unspecified bycatch in the LE sablefish primary fishery using hook-and-line gear.

Year	Area			Observed		Observed		Observed		Observed		Observed	
		Observed Sablefish Catch (mt)	Fleet Sablefish Landings (mt)	Unspeci- fied Count (Indivi- duals)	Unspeci- fied Ratio	Bycatch Unspeci- fied Ratio SE	Unspeci- fied Catch (Indivi- duals)	Unspeci- fied Weight (mt)	Weighted Unspeci- fied Weight Ratio	Weighted Unspeci- fied Weight Ratio SE	Bycatch Unspeci- fied Weight Ratio	Unspeci- fied Weight Ratio SE	Unspeci- fied Catch Weight (mt)
2003	North of Cape Falcon, OR	158	502	--	--	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	123	357	--	--	--	--	--	--	--	--	--	--
2007	North of Cape Falcon, OR	163	605	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	84	307	1	0.0119	0.0010	4	0.01	0.0001	0.0000	0.0000	0.02	
2015	North of Cape Falcon, OR	124	369	--	--	--	--	--	--	--	--	--	--

Table 11. Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, stratified by state, year, and area for the pink shrimp fishery. Strata not listed were not observed.

State	Year	Area	Observed Pink Shrimp Catch (mt)	Fleet Pink Shrimp Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
Washington	2010	North of Cape Falcon, OR	399	4296	7	18	341	--	--
Washington	2011	North of Cape Falcon, OR	697	4312	11	35	578	--	--
Washington	2012	North of Cape Falcon, OR	626	4239	10	31	524	--	--
Washington	2013	North of Cape Falcon, OR	627	6158	13	29	386	--	--
Washington	2014	North of Cape Falcon, OR	981	13876	17	43	401	--	--
Washington	2015	North of Cape Falcon, OR	2151	18814	24	100	1458	2	0
Washington	2016	North of Cape Falcon, OR	1108	6396	17	59	974	--	--
Oregon	2004	North of Cape Falcon, OR	142	2135	11	24	240	--	--
Oregon	2004	Cape Falcon, OR to Cape Mendocino, CA	285	3402	18	40	525	--	--
Oregon	2005	North of Cape Falcon, OR	105	1888	11	12	132	--	--
Oregon	2005	Cape Falcon, OR to Cape Mendocino, CA	298	5272	18	32	401	--	--
Oregon	2007	North of Cape Falcon, OR	76	1612	9	15	161	--	--
Oregon	2007	Cape Falcon, OR to Cape Blanco, OR	529	7281	27	56	723	--	--
Oregon	2007	Cape Blanco, OR to Cape Mendocino, CA	45	236	3	5	45	--	--
Oregon	2008	North of Cape Falcon, OR	215	3309	11	19	292	--	--
Oregon	2008	Cape Falcon, OR to Cape Blanco, OR	386	7648	23	34	429	--	--
Oregon	2008	Cape Blanco, OR to Cape Mendocino, CA	72	620	6	6	64	--	--
Oregon	2009	North of Cape Falcon, OR	192	2099	13	17	212	--	--
Oregon	2009	Cape Falcon, OR to Cape Blanco, OR	366	7453	25	32	366	--	--
Oregon	2009	Cape Blanco, OR to Cape Mendocino, CA	194	498	11	13	94	--	--
Oregon	2010	North of Cape Falcon, OR	222	3767	12	25	256	--	--
Oregon	2010	Cape Falcon, OR to Cape Blanco, OR	993	9533	34	68	771	--	--
Oregon	2010	Cape Blanco, OR to Cape Mendocino, CA	491	991	17	25	206	--	--
Oregon	2011	North of Cape Falcon, OR	527	4556	12	30	458	--	--
Oregon	2011	Cape Falcon, OR to Cape Blanco, OR	1417	16274	33	81	978	--	--
Oregon	2011	Cape Blanco, OR to Cape Mendocino, CA	1042	1085	21	50	456	--	--
Oregon	2012	North of Cape Falcon, OR	467	3990	14	33	507	--	--
Oregon	2012	Cape Falcon, OR to Cape Blanco, OR	1064	16633	38	86	930	--	--

Table 11 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, for the pink shrimp fishery.

State	Year	Area	Observed	Fleet Pink	Observed	Observed	Observed	Percent of
			Pink Shrimp Catch (mt)	Shrimp Landings (mt)				Observed Hauls that Encountered Salmon
Oregon	2012	Cape Blanco, OR to Cape Mendocino, CA	1482	1669	31	70	685	1
Oregon	2013	North of Cape Falcon, OR	417	3307	12	23	292	--
Oregon	2013	Cape Falcon, OR to Cape Blanco, OR	1085	16289	37	66	745	--
Oregon	2013	Cape Blanco, OR to Cape Mendocino, CA	811	2009	22	37	366	--
Oregon	2014	North of Cape Falcon, OR	824	4634	18	32	401	--
Oregon	2014	Cape Falcon, OR to Cape Blanco, OR	1110	17199	29	70	797	--
Oregon	2014	Cape Blanco, OR to Cape Mendocino, CA	357	1741	12	20	265	--
Oregon	2015	North of Cape Falcon, OR	959	7764	27	62	950	--
Oregon	2015	Cape Falcon, OR to Cape Blanco, OR	409	13339	23	46	399	--
Oregon	2015	Cape Blanco, OR to Cape Mendocino, CA	914	3170	21	46	641	--
Oregon	2016	North of Cape Falcon, OR	685	2829	15	37	633	--
Oregon	2016	Cape Falcon, OR to Cape Blanco, OR	971	10835	41	95	1182	--
Oregon	2016	Cape Blanco, OR to Cape Mendocino, CA	653	2451	29	53	652	--
California	2010	South of Cape Blanco, OR	266	1771	8	14	134	--
California	2011	South of Cape Blanco, OR	421	3333	8	19	203	--
California	2012	South of Cape Blanco, OR	348	2791	7	15	175	--
California	2013	South of Cape Blanco, OR	360	3915	10	17	188	--
California	2014	South of Cape Blanco, OR	598	3845	11	26	337	--
California	2015	South of Cape Blanco, OR	335	3453	9	23	335	--
California	2016	Cape Blanco, OR to Cape Mendocino, CA	130	885	8	17	275	1
California	2016	North of Cape Falcon, OR	184	452	5	11	131	0

Table 12a. Observed and expanded Chinook salmon bycatch in the pink shrimp fishery.

State	Year	Area	Observed	Observed	Observed	Expanded	Observed	Observed	Observed	Observed	Observed
			Pink Shrimp Catch (mt)	Fleet Pink Shrimp Landings (mt)	Chinook Count (Indivi- duals)	Bycatch Chinook Ratio	Bycatch Chinook Ratio SE	Chinook Catch (Indivi- duals)	Chinook Weight (mt)	Bycatch Chinook Weight Ratio	Chinook Weight Ratio SE
WA	2015	North of Cape Falcon, OR	2151	18814	--	--	--	--	--	--	--
OR	2012	Cape Blanco, OR to Cape Mendocino, CA	1482	1669	2	0.0013	0.0001	2	0.00	0.0000	0.0000
CA	2016	Cape Blanco, OR to Cape Mendocino, CA	130	885	7	0.0534	0.0051	47	0.00	0.0000	0.0000

Table 12b. Observed and expanded chum salmon bycatch in the pink shrimp fishery.

State	Year	Area	Observed	Observed	Observed	Expanded	Observed	Observed	Observed	Observed	Observed
			Pink Shrimp Catch (mt)	Fleet Pink Shrimp Landings (mt)	Chum Count (Indivi- duals)	Bycatch Chum Ratio	Bycatch Chum Ratio SE	Chum Catch (Indivi- duals)	Chum Weight (mt)	Bycatch Chum Weight Ratio	Chum Weight Ratio SE
WA	2015	North of Cape Falcon, OR	2151	18814	6	0.0028	0.0006	53	0.00	0.0000	0.0000
OR	2012	Cape Blanco, OR to Cape Mendocino, CA	1482	1669	--	--	--	--	--	--	--
CA	2016	Cape Blanco, OR to Cape Mendocino, CA	130	885	--	--	--	--	--	--	--

Table 12c. Observed and expanded coho salmon bycatch in the pink shrimp fishery.

State	Year	Area	Observed	Observed	Observed	Expanded	Observed	Observed	Observed	Observed	Observed
			Pink Shrimp Catch (mt)	Fleet Pink Shrimp Landings (mt)	Coho Count (Indivi- duals)	Bycatch Coho Ratio	Bycatch Coho Ratio SE	Coho Catch (Indivi- duals)	Coho Weight (mt)	Bycatch Coho Weight Ratio	Coho Weight Ratio SE
WA	2015	North of Cape Falcon, OR	2151	18814	3	0.0014	0.0004	27	0.00	0.0000	0.0000
OR	2012	Cape Blanco, OR to Cape Mendocino, CA	1482	1669	--	--	--	--	--	--	--
CA	2016	Cape Blanco, OR to Cape Mendocino, CA	130	885	--	--	--	--	--	--	--

Table 13. Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, stratified by state, year, and area for the nearshore fishery. Only effort north of lat 40°10'N is shown, as no salmon interactions occurred south of that line.

Year	Area	Season	Observed	Fleet	Observed	Observed	Observed	Observed	Percent of
			Nearshore	Nearshore				Encountered	Observed
			Species Catch	Species Landings				Salmon	
			(mt)	(mt)					
2003	Cape Blanco, OR to Cape Mendocino, CA	Winter	0	12	3	5	9	--	--
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	3	63	5	19	45	1	2
2004	Cape Falcon, OR to Cape Blanco, OR	All Year	8	133	22	79	166	3	2
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	5	35	6	36	58	1	2
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	122	23	106	138	1	1
2005	Cape Falcon, OR to Cape Blanco, OR	Winter	2	37	8	24	35	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	6	74	24	57	62	1	2
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	44	8	23	27	1	4
2005	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	125	28	96	124	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Winter	1	12	8	17	23	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	11	92	25	109	181	1	1
2006	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	21	12	21	25	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	125	37	133	196	1	1
2007	Cape Falcon, OR to Cape Blanco, OR	Winter	1	16	7	14	18	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	10	107	17	92	152	1	1
2007	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	40	13	38	42	--	--
2007	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	128	19	91	134	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Winter	3	30	13	29	38	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	8	103	20	69	80	2	3
2008	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	56	13	37	41	--	--
2008	Cape Blanco, OR to Cape Mendocino, CA	Summer	6	125	16	66	78	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Winter	2	46	11	21	26	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	10	114	20	87	151	6	4
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	40	14	44	50	1	2
2009	Cape Blanco, OR to Cape Mendocino, CA	Summer	4	124	16	39	41	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Winter	3	34	13	29	43	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	6	94	23	71	86	3	3
2010	Cape Blanco, OR to Cape Mendocino, CA	Winter	1	16	10	13	15	--	--

Table 13 (continued). Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, for the nearshore fishery.

Year	Area	Season	Observed	Fleet	Observed	Observed	Observed	Percent of	
			Nearshore Species Catch (mt)	Nearshore Species Landings (mt)				Observed Hauls that Encountered Salmon	Observed Hauls that Encountered Salmon
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	85	27	86	105	2	2
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	3	37	15	31	40	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	8	107	26	105	125	3	2
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	15	13	30	36	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Summer	9	70	27	89	115	2	2
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	3	33	22	41	53	2	4
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	13	118	28	135	165	3	2
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	11	9	21	23	2	9
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	64	20	70	98	2	2
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	5	44	19	60	70	2	3
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	6	105	26	68	93	4	4
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	22	17	47	51	5	10
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	71	24	68	88	1	1
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	2	41	14	21	22	1	5
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	9	105	28	81	88	5	6
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	3	20	12	35	37	1	3
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	77	25	68	87	1	1
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	4	52	19	40	42	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	12	103	30	100	133	3	2
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	6	59	9	43	53	4	8
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	109	19	82	96	1	1
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	4	32	15	38	40	1	3
2016	Cape Falcon, OR to Cape Blanco, OR	Summer	11	97	29	100	125	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	25	7	26	27	1	4
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	11	94	20	92	116	1	1

Table 14a. Observed and expanded Chinook salmon bycatch in the nearshore fishery.

Year	Area	Season	Observed Nearshore Species Catch (mt)	Fleet Nearshore Species Landings (mt)	Observed Chinook Count (Individuals)	Observed Bycatch Chinook Ratio	Observed Bycatch Chinook Ratio SE	Expanded Chinook Catch (Individuals)	Observed Chinook Weight (mt)	Observed Bycatch Chinook Weight Ratio	Observed Bycatch Chinook Weight Ratio SE	Expanded Chinook Catch Weight (mt)
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	3	63	1	0.3468	0.0787	22	0.01	0.0020	0.0004	0.12
2004	Cape Falcon, OR to Cape Blanco, OR	All Year	8	133	2	0.2445	0.0313	33	0.00	0.0005	0.0001	0.06
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	5	35	1	0.1903	0.0297	7	0.00	0.0003	0.0001	0.01
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	122	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	6	74	1	0.1800	0.0268	13	0.01	0.0010	0.0001	0.07
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	44	1	0.4108	0.0899	18	0.00	0.0001	0.0000	0.00
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	11	92	1	0.0916	0.0091	8	0.02	0.0015	0.0001	0.13
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	125	1	0.0860	0.0096	11	0.00	0.0001	0.0000	0.01
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	10	107	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	8	103	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	10	114	1	0.1008	0.0114	12	0.00	0.0004	0.0000	0.04
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	40	1	0.2597	0.0480	10	0.00	0.0011	0.0002	0.05
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	6	94	1	0.1665	0.0228	16	0.01	0.0015	0.0002	0.14
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	85	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	8	107	--	--	--	--	--	--	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Summer	9	70	1	0.1100	0.0133	8	0.01	0.0007	0.0001	0.05
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	3	33	2	0.7197	0.1210	24	0.00	0.0016	0.0003	0.05
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	13	118	2	0.1565	0.0148	18	0.01	0.0011	0.0003	0.13
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	11	1	0.6260	0.1677	7	0.01	0.0043	0.0011	0.05
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	64	2	0.2105	0.0279	14	0.01	0.0014	0.0002	0.09
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	5	44	3	0.6489	0.1823	29	0.02	0.0051	0.0015	0.22
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	6	105	3	0.5239	0.0673	55	0.02	0.0028	0.0005	0.30
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	22	5	1.3446	0.2343	29	0.02	0.0042	0.0013	0.09
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	71	1	0.1300	0.0194	9	0.01	0.0012	0.0002	0.08
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	2	41	1	0.5466	0.1329	22	0.01	0.0050	0.0012	0.20
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	9	105	1	0.1128	0.0143	12	0.01	0.0009	0.0001	0.10
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	3	20	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	77	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	12	103	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	6	59	3	0.5292	0.0939	31	0.01	0.0017	0.0006	0.10
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	109	1	0.0834	0.0111	9	0.01	0.0006	0.0001	0.06
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	4	32	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	25	1	0.2337	0.0539	6	0.00	0.0004	0.0001	0.01
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	11	94	1	0.0929	0.0128	9	0.01	0.0006	0.0001	0.06

Table 14b. Observed and expanded coho salmon bycatch in the nearshore fishery.

Year	Area	Season	Observed Nearshore Species Catch (mt)	Fleet Nearshore Species Landings (mt)	Observed Coho Count (Individuals)	Observed Bycatch Coho Ratio	Observed Bycatch Coho Ratio SE	Expanded Coho Catch (Individuals)	Observed Coho Weight (mt)	Observed Bycatch Coho Weight Ratio	Observed Bycatch Coho Weight Ratio SE	Expanded Coho Catch Weight (mt)
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	3	63	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	All Year	8	133	2	0.2445	0.0313	33	0.01	0.0011	0.0002	0.14
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	5	35	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	122	1	0.0986	0.0108	12	0.00	0.0004	0.0000	0.05
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	6	74	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	44	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	11	92	--	--	--	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	125	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	10	107	1	0.1041	0.0114	11	0.00	0.0001	0.0000	0.01
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	8	103	3	0.3960	0.1066	41	0.01	0.0017	0.0006	0.17
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	10	114	6	0.6049	0.1128	69	0.02	0.0017	0.0004	0.19
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	40	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	6	94	2	0.3331	0.0457	31	0.01	0.0017	0.0002	0.16
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	85	1	0.1177	0.0152	10	0.01	0.0006	0.0001	0.05
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	8	107	4	0.5153	0.1202	55	0.01	0.0016	0.0005	0.17
2011	Cape Blanco, OR to Cape Mendocino, CA	Summer	9	70	1	0.1100	0.0133	8	0.00	0.0005	0.0001	0.04
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	3	33	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	13	118	1	0.0782	0.0074	9	0.00	0.0004	0.0000	0.04
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	11	1	0.6260	0.1677	7	0.00	0.0017	0.0005	0.02
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	64	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	5	44	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	6	105	1	0.1746	0.0226	18	0.00	0.0006	0.0001	0.06
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	22	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	71	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	2	41	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	9	105	5	0.5642	0.1208	59	0.01	0.0016	0.0003	0.17
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	3	20	1	0.3582	0.0709	7	0.00	0.0003	0.0001	0.01
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	77	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	12	103	2	0.1737	0.0187	18	0.00	0.0004	0.0002	0.04
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	6	59	1	0.1764	0.0317	10	0.00	0.0001	0.0000	0.01
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	109	--	--	--	--	--	--	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	4	32	1	0.2741	0.0523	9	0.00	0.0001	0.0000	0.00
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	25	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	11	94	--	--	--	--	--	--	--	--

Table 14c. Observed and expanded unspecificed bycatch in the nearshore fishery.

Year	Area	Season	Observed Nearshore Species Catch (mt)	Fleet Nearshore Species Landings (mt)	Observed Unspecified Count (Individuals)	Observed Bycatch Unspecified Ratio	Observed Bycatch Unspecified Ratio SE	Expanded Unspecified Catch (Individuals)	Observed Unspecified Weight (mt)	Observed Bycatch Unspecified Weight Ratio	Observed Bycatch Unspecified Weight Ratio SE	Expanded Unspecified Catch Weight (mt)
2003	Cape Blanco, OR to Cape Mendocino, CA	Summer	3	63	--	--	--	--	--	--	--	--
2004	Cape Falcon, OR to Cape Blanco, OR	All Year	8	133	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Winter	5	35	--	--	--	--	--	--	--	--
2004	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	122	--	--	--	--	--	--	--	--
2005	Cape Falcon, OR to Cape Blanco, OR	Summer	6	74	--	--	--	--	--	--	--	--
2005	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	44	--	--	--	--	--	--	--	--
2006	Cape Falcon, OR to Cape Blanco, OR	Summer	11	92	--	--	--	--	--	--	--	--
2006	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	125	--	--	--	--	--	--	--	--
2007	Cape Falcon, OR to Cape Blanco, OR	Summer	10	107	--	--	--	--	--	--	--	--
2008	Cape Falcon, OR to Cape Blanco, OR	Summer	8	103	--	--	--	--	--	--	--	--
2009	Cape Falcon, OR to Cape Blanco, OR	Summer	10	114	--	--	--	--	--	--	--	--
2009	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	40	--	--	--	--	--	--	--	--
2010	Cape Falcon, OR to Cape Blanco, OR	Summer	6	94	1	0.1665	0.0228	16	0.00	0.0008	0.0001	0.07
2010	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	85	1	0.1177	0.0152	10	0.01	0.0011	0.0001	0.09
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	8	107	--	--	--	--	--	--	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Summer	9	70	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	3	33	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	13	118	--	--	--	--	--	--	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	2	11	--	--	--	--	--	--	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	10	64	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	5	44	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	6	105	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	22	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	71	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	2	41	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	9	105	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	3	20	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	8	77	1	0.1193	0.0170	9	0.01	0.0008	0.0001	0.06
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	12	103	1	0.0868	0.0094	9	0.00	0.0004	0.0000	0.04
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	6	59	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	12	109	1	0.0834	0.0111	9	0.01	0.0005	0.0001	0.05
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	4	32	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	4	25	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	11	94	--	--	--	--	--	--	--	--

Table 15. Observed vessels, trips, hauls, catch, and salmon, as well as fleet landings, stratified by year, season, depth bin, and salmon management area for catch shares non-hake bottom trawl, including non-hake midwater trawl in 2011 and LE California halibut in 2011 and 2013.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2011	North of Cape Falcon, OR	Winter	0-125	336	6	27	223	2	1
2011	North of Cape Falcon, OR	Winter	125-250	1099	18	132	402	3	1
2011	North of Cape Falcon, OR	Winter	250+	1609	19	150	817	--	--
2011	North of Cape Falcon, OR	Summer	0-125	1704	17	129	1542	11	1
2011	North of Cape Falcon, OR	Summer	125-250	1292	16	95	471	1	0
2011	North of Cape Falcon, OR	Summer	250+	701	17	100	484	1	0
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	898	30	111	364	12	3
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1617	31	165	740	2	0
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	147	8	47	315	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	544	17	75	271	1	0
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	673	17	84	384	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	288	12	46	98	8	8
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1219	19	119	516	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250	656	16	94	237	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	1320	14	121	462	--	--
2011	South of Cape Mendocino, CA	Winter	0-125	28	4	9	28	--	--
2011	South of Cape Mendocino, CA	Winter	125-250	163	8	36	106	--	--
2011	South of Cape Mendocino, CA	Winter	250+	288	8	50	188	--	--
2011	South of Cape Mendocino, CA	Summer	0-125	386	9	136	542	3	1
2011	South of Cape Mendocino, CA	Summer	125-250	315	12	80	186	--	--
2011	South of Cape Mendocino, CA	Summer	250+	929	13	127	525	--	--
2012	North of Cape Falcon, OR	Winter	0-125	207	9	21	146	1	1
2012	North of Cape Falcon, OR	Winter	125-250	1388	18	119	497	16	3
2012	North of Cape Falcon, OR	Winter	250+	1337	20	129	626	1	0
2012	North of Cape Falcon, OR	Summer	0-125	2675	15	157	1936	7	0
2012	North of Cape Falcon, OR	Summer	125-250	928	14	85	379	3	1
2012	North of Cape Falcon, OR	Summer	250+	397	13	67	251	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1054	32	143	405	23	6

Table 15 (continued). Observed vessels, trips, hauls, catch, and salmon, as well as fleet landings, for catch shares non-hake bottom trawl.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1655	30	164	746	10	1
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	125	8	42	274	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	476	16	51	205	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	704	20	77	385	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	220	18	42	83	6	7
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1212	19	104	423	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	52	4	11	57	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	366	12	60	145	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	1188	13	101	445	--	--
2012	South of Cape Mendocino, CA	Winter	0-125	44	3	27	116	1	1
2012	South of Cape Mendocino, CA	Winter	125-250	217	11	53	143	--	--
2012	South of Cape Mendocino, CA	Winter	250+	594	11	68	329	--	--
2012	South of Cape Mendocino, CA	Summer	0-125	288	8	110	509	--	--
2012	South of Cape Mendocino, CA	Summer	125-250	275	9	72	199	--	--
2012	South of Cape Mendocino, CA	Summer	250+	939	9	108	501	--	--
2013	North of Cape Falcon, OR	Winter	0-125	318	12	31	229	9	4
2013	North of Cape Falcon, OR	Winter	125-250	1848	17	133	814	10	1
2013	North of Cape Falcon, OR	Winter	250+	1392	17	145	747	1	0
2013	North of Cape Falcon, OR	Summer	0-125	2445	12	182	1805	17	1
2013	North of Cape Falcon, OR	Summer	125-250	717	12	80	347	--	--
2013	North of Cape Falcon, OR	Summer	250+	420	10	75	263	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	0-125	7	5	5	12	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1591	29	181	631	11	2
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1839	29	184	923	3	0
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	158	9	61	242	1	0
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	366	14	48	177	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	573	17	69	311	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	355	14	62	123	17	14
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1320	22	127	534	4	1

Table 15 (continued). Observed vessels, trips, hauls, catch, and salmon, as well as fleet landings, for catch shares non-hake bottom trawl.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	228	4	35	158	6	4
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	342	13	51	131	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	1415	14	103	474	--	--
2013	South of Cape Mendocino, CA	Winter	0-125	105	7	27	168	3	2
2013	South of Cape Mendocino, CA	Winter	125-250	216	10	64	136	--	--
2013	South of Cape Mendocino, CA	Winter	250+	571	11	83	333	--	--
2013	South of Cape Mendocino, CA	Summer	0-125	511	9	125	544	1	0
2013	South of Cape Mendocino, CA	Summer	125-250	227	9	81	194	--	--
2013	South of Cape Mendocino, CA	Summer	250+	881	12	123	523	--	--
2014	North of Cape Falcon, OR	Winter	0-125	307	7	37	282	8	3
2014	North of Cape Falcon, OR	Winter	125-250	1012	12	89	400	10	3
2014	North of Cape Falcon, OR	Winter	250+	1251	14	106	498	1	0
2014	North of Cape Falcon, OR	Summer	0-125	2113	11	139	1570	24	2
2014	North of Cape Falcon, OR	Summer	125-250	423	9	53	207	--	--
2014	North of Cape Falcon, OR	Summer	250+	305	10	50	183	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1523	29	163	453	60	13
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1569	29	155	694	23	3
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	163	8	49	239	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	252	12	36	116	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	333	11	41	171	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	338	19	69	121	18	15
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1725	17	124	629	4	1
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	325	4	43	208	2	1
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	267	10	50	117	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	962	11	78	328	1	0
2014	South of Cape Mendocino, CA	Winter	0-125	287	7	55	309	51	17
2014	South of Cape Mendocino, CA	Winter	125-250	219	10	61	123	2	2
2014	South of Cape Mendocino, CA	Winter	250+	621	11	95	372	1	0
2014	South of Cape Mendocino, CA	Summer	0-125	314	10	100	457	9	2

Table 15 (continued). Observed vessels, trips, hauls, catch, and salmon, as well as fleet landings, for catch shares non-hake bottom trawl.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2014	South of Cape Mendocino, CA	Summer	125-250	252	11	70	187	--	--
2014	South of Cape Mendocino, CA	Summer	250+	834	10	111	469	--	--
2015	North of Cape Falcon, OR	Winter	0-125	208	9	37	266	6	2
2015	North of Cape Falcon, OR	Winter	125-250	1785	17	121	585	21	4
2015	North of Cape Falcon, OR	Winter	250+	1151	17	115	471	7	1
2015	North of Cape Falcon, OR	Summer	0-125	2316	9	135	1563	10	1
2015	North of Cape Falcon, OR	Summer	125-250	370	9	48	175	2	1
2015	North of Cape Falcon, OR	Summer	250+	260	9	45	136	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1789	31	185	563	90	16
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1541	28	157	646	18	3
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	174	5	47	222	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	250	13	28	107	1	1
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	146	12	24	65	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	449	15	77	151	33	22
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1440	20	107	513	10	2
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250	582	8	58	278	1	0
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	927	10	56	264	--	--
2015	South of Cape Mendocino, CA	Winter	0-125	115	4	21	106	25	24
2015	South of Cape Mendocino, CA	Winter	125-250	138	9	40	115	2	2
2015	South of Cape Mendocino, CA	Winter	250+	331	10	57	221	--	--
2015	South of Cape Mendocino, CA	Summer	0-125	211	7	68	370	18	5
2015	South of Cape Mendocino, CA	Summer	125-250	266	6	53	183	--	--
2015	South of Cape Mendocino, CA	Summer	250+	753	7	71	316	--	--
2016	North of Cape Falcon, OR	Winter	0-125	283	12	35	239	3	1
2016	North of Cape Falcon, OR	Winter	125-250	1633	16	109	505	17	3
2016	North of Cape Falcon, OR	Winter	250+	1113	16	98	380	1	0
2016	North of Cape Falcon, OR	Summer	0-125	2598	12	169	1780	8	0
2016	North of Cape Falcon, OR	Summer	125-250	403	11	54	150	1	1
2016	North of Cape Falcon, OR	Summer	250+	240	8	54	143	1	1

Table 15 (continued). Observed vessels, trips, hauls, catch, and salmon, as well as fleet landings, for catch shares non-hake bottom trawl.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	35	4	7	25	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1908	27	179	519	39	8
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	205+	1925	28	165	626	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	184	4	35	187	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	492	10	48	242	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Summer	250+	330	12	34	139	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	465	13	58	129	11	9
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	958	17	79	279	3	1
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	219	4	24	136	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	125-250	397	5	38	132	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	756	8	51	208	--	--
2016	South of Cape Mendocino, CA	Winter	0-125	25	4	11	29	4	14
2016	South of Cape Mendocino, CA	Winter	125-250	125	4	27	113	2	2
2016	South of Cape Mendocino, CA	Winter	250+	152	4	28	111	--	--
2016	South of Cape Mendocino, CA	Summer	0-125	142	5	53	238	3	1
2016	South of Cape Mendocino, CA	Summer	125-250	63	4	20	53	--	--
2016	South of Cape Mendocino, CA	Summer	250+	320	5	34	154	--	--

Table 16a. Observed at-sea, estimated unknown, landed, and total Chinook salmon bycatch in the catch shares non-hake bottom trawl fishery, including non-hake midwater trawl in 2011 and LE California halibut in 2011 to 2013.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea Unknown Chinook Bycatch Estimate (Individuals)			Landed Chinook Individuals	Total Chinook Individuals	At-Sea Unknown Chinook Bycatch Estimate (Individuals)			Landed Chinook Weight (mt)	Total Chinook Weight (mt)
					At-Sea Observed Chinook Bycatch (Individuals)	Unknown Chinook Bycatch (Individuals)	Landed Chinook Estimate (Individuals)			At-Sea Observed Chinook Bycatch Weight (mt)	Unknown Chinook Bycatch Weight (mt)	Landed Chinook Weight (mt)		
2011	North of Cape Falcon, OR	Winter	0-125	336	2	0	--	2	2	0.01	0.00	--	--	0.01
2011	North of Cape Falcon, OR	Winter	125-250	1099	3	0	--	3	3	0.01	0.00	--	--	0.01
2011	North of Cape Falcon, OR	Summer	0-125	1704	40	1	--	41	41	0.07	0.00	--	--	0.07
2011	North of Cape Falcon, OR	Summer	125-250	1292	1	0	--	1	1	0.00	0.00	--	--	0.00
2011	North of Cape Falcon, OR	Summer	250+	701	--	--	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	898	103	9	--	112	112	0.17	0.02	--	--	0.19
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1617	2	0	--	2	2	0.00	0.00	--	--	0.00
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	544	1	0	--	1	1	0.00	0.00	--	--	0.00
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	288	8	0	--	8	8	0.01	0.00	--	--	0.01
2011	South of Cape Mendocino, CA	Summer	0-125	386	4	0	--	4	4	0.01	0.00	--	--	0.01
2012	North of Cape Falcon, OR	Winter	0-125	207	1	0	--	1	1	0.00	0.00	--	--	0.00
2012	North of Cape Falcon, OR	Winter	125-250	1388	25	1	--	26	26	0.07	0.00	--	--	0.07
2012	North of Cape Falcon, OR	Winter	250+	1337	1	0	--	1	1	0.00	0.00	--	--	0.00
2012	North of Cape Falcon, OR	Summer	0-125	2675	7	0	--	7	7	0.01	0.00	--	--	0.02
2012	North of Cape Falcon, OR	Summer	125-250	928	9	2	--	11	11	0.03	0.00	--	--	0.03
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1054	36	1	0	37	37	0.07	0.00	0.00	0.00	0.07
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1655	2	0	1	3	3	0.01	0.00	0.00	0.00	0.01
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	220	216	1	--	217	217	0.29	0.00	--	--	0.29
2012	South of Cape Mendocino, CA	Winter	0-125	44	1	0	--	1	1	0.00	0.00	--	--	0.00
2013	North of Cape Falcon, OR	Winter	0-125	318	35	0	--	35	35	0.05	0.00	--	--	0.05
2013	North of Cape Falcon, OR	Winter	125-250	1848	12	0	--	12	12	0.02	0.00	--	--	0.02
2013	North of Cape Falcon, OR	Winter	250+	1392	1	0	--	1	1	0.00	0.00	--	--	0.00
2013	North of Cape Falcon, OR	Summer	0-125	2445	121	4	--	125	125	0.23	0.01	--	--	0.23
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1591	22	1	--	23	23	0.06	0.00	--	--	0.06
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1839	11	0	--	11	11	0.02	0.00	--	--	0.02
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	158	1	0	--	1	1	0.00	0.00	--	--	0.00
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	355	94	0	1	95	95	0.17	0.00	0.00	0.00	0.17

Table 16a (continued). Observed at-sea, estimated unknown, landed, and total Chinook salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea Observed Chinook Bycatch (Individuals)	At-Sea Unknown Chinook Bycatch Estimate (Individuals)	Landed Chinook Individuals	Total Chinook Individuals	At-Sea Observed Chinook Bycatch Weight (mt)	At-Sea Unknown Chinook Bycatch Estimate (Individuals)	Landed Chinook Weight (mt)	Total Chinook Weight (mt)
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1320	--	0	0	0	--	0.00	0.00	0.00
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	228	12	0	--	12	0.02	0.00	--	0.02
2013	South of Cape Mendocino, CA	Winter	0-125	105	1	--	--	1	0.00	--	--	0.00
2013	South of Cape Mendocino, CA	Summer	0-125	511	5	0	--	6	0.01	0.00	--	0.01
2014	North of Cape Falcon, OR	Winter	0-125	307	215	0	--	215	0.23	0.00	--	0.23
2014	North of Cape Falcon, OR	Winter	125-250	1012	8	0	1	9	0.02	0.00	0.00	0.03
2014	North of Cape Falcon, OR	Winter	250+	1251	3	0	--	3	0.01	0.00	--	0.01
2014	North of Cape Falcon, OR	Summer	0-125	2113	165	4	--	169	0.19	0.00	--	0.20
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1523	91	2	5	98	0.24	0.00	0.01	0.25
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1569	9	0	3	12	0.03	0.00	0.00	0.03
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	338	315	11	--	326	0.46	0.02	--	0.47
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1725	4	0	--	4	0.01	0.00	--	0.01
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	325	3	0	--	3	0.00	0.00	--	0.01
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	962	1	--	--	1	0.00	--	--	0.00
2014	South of Cape Mendocino, CA	Winter	0-125	287	117	0	--	117	0.36	0.00	--	0.36
2014	South of Cape Mendocino, CA	Winter	125-250	219	4	0	--	4	0.01	0.00	--	0.01
2014	South of Cape Mendocino, CA	Winter	250+	621	1	0	--	1	0.00	0.00	--	0.00
2014	South of Cape Mendocino, CA	Summer	0-125	314	22	0	--	22	0.04	0.00	--	0.04
2015	North of Cape Falcon, OR	Winter	0-125	208	44	0	--	44	0.08	0.00	--	0.08
2015	North of Cape Falcon, OR	Winter	125-250	1785	44	1	2	46	0.08	0.00	0.00	0.09
2015	North of Cape Falcon, OR	Winter	250+	1151	5	0	0	5	0.01	0.00	0.00	0.01
2015	North of Cape Falcon, OR	Summer	0-125	2316	64	1	--	65	0.12	0.00	--	0.12
2015	North of Cape Falcon, OR	Summer	125-250	370	2	0	--	2	0.00	0.00	--	0.00
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1789	271	9	6	285	0.49	0.02	0.01	0.51
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1541	12	0	1	13	0.02	0.00	0.00	0.02
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	250	2	0	--	2	0.00	0.00	--	0.00
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	449	368	1	0	369	0.61	0.00	0.00	0.62
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1440	9	0	1	10	0.02	0.00	0.00	0.02

Table 16a (continued). Observed at-sea, estimated unknown, landed, and total Chinook salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (ft/h)	Fleet	At-Sea			Landed Chinook Individuals	Total Chinook Individuals	At-Sea			Landed Chinook Weight (mt)	Total Chinook Weight (mt)
					Observed Chinook Bycatch (Individuals)	Unknown Chinook Bycatch Estimate (Individuals)	Chinook Weight (mt)			Observed Chinook Bycatch (Individuals)	Unknown Chinook Bycatch Estimate (Individuals)	Chinook Weight (mt)		
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250	582	1	0	--	1	1	0.00	0.00	--	0.00	0.00
2015	South of Cape Mendocino, CA	Winter	0-125	115	132	10	--	142	0.38	0.03	--	0.40		
2015	South of Cape Mendocino, CA	Winter	125-250	138	2	0	--	2	0.01	0.00	--	0.01		
2015	South of Cape Mendocino, CA	Summer	0-125	211	27	0	--	27	0.10	0.00	--	0.10		
2016	North of Cape Falcon, OR	Winter	0-125	283	10	0	--	10	0.01	0.00	--	0.01		
2016	North of Cape Falcon, OR	Winter	125-250	1633	49	1	--	50	0.14	0.00	--	0.15		
2016	North of Cape Falcon, OR	Winter	250+	1113	1	0	--	1	0.00	0.00	--	0.00		
2016	North of Cape Falcon, OR	Summer	0-125	2598	17	0	--	18	0.04	0.00	--	0.04		
2016	North of Cape Falcon, OR	Summer	125-250	403	1	0	--	1	0.00	0.00	--	0.00		
2016	North of Cape Falcon, OR	Summer	250+	240	--	--	--	--	--	--	--	--		
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1908	96	2	--	98	0.21	0.00	--	0.22		
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	465	30	0	--	30	0.06	0.00	--	0.06		
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	958	4	0	--	4	0.01	0.00	--	0.01		
2016	South of Cape Mendocino, CA	Winter	0-250	25	5	--	--	5	0.01	--	--	0.01		
2016	South of Cape Mendocino, CA	Winter	250+	125	3	--	--	3	0.01	--	--	0.01		
2016	South of Cape Mendocino, CA	Summer	0-250	142	2	0	1	3	0.01	0.00	0.00	0.01		

Table 16b. Observed at-sea, estimated unknown, landed, and total coho salmon bycatch in the catch shares non-hake bottom trawl fishery, including non-hake midwater trawl in 2011 and LE California halibut in 2011 to 2013.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea			At-Sea Observed Coho Bycatch Weight (mt)	At-Sea		
					At-Sea Observed Coho Bycatch (Individuals)	Unknown Coho Bycatch Estimate (Individuals)	Landed Coho Individuals		At-Sea Observed Coho Bycatch Weight (mt)	Unknown Coho Bycatch Estimate Weight (mt)	Landed Coho Weight (mt)
2011	North of Cape Falcon, OR	Winter	0-125	336	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Winter	125-250	1099	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	0-125	1704	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	125-250	1292	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	250+	701	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	898	16	1	--	17	0.02	0.00	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1617	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	544	--	--	--	--	--	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	288	2	0	--	2	0.01	0.00	--
2011	South of Cape Mendocino, CA	Summer	0-125	386	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	0-125	207	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	125-250	1388	4	0	--	4	0.01	0.00	--
2012	North of Cape Falcon, OR	Winter	250+	1337	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	0-125	2675	1	0	--	1	0.00	0.00	--
2012	North of Cape Falcon, OR	Summer	125-250	928	1	0	--	1	0.00	0.00	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1054	9	0	--	9	0.02	0.00	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1655	--	--	--	--	--	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	220	11	0	--	11	0.02	0.00	--
2012	South of Cape Mendocino, CA	Winter	0-125	44	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	0-125	318	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	125-250	1848	3	0	--	3	0.00	0.00	--
2013	North of Cape Falcon, OR	Winter	250+	1392	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Summer	0-125	2445	33	1	--	34	0.03	0.00	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1591	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1839	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	158	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	355	3	0	--	3	0.00	0.00	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1320	--	--	--	--	--	--	--

Table 16b (continued). Observed at-sea, estimated unknown, landed, and total coho salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet	At-Sea			At-Sea Observed Coho Bycatch (Individuals)	At-Sea Unknown Coho Bycatch Estimate (Individuals)	Landed Coho (Individuals)	Total Coho Individuals	At-Sea		
					Groundfish Landings (mt)	Coho Bycatch (Individuals)	Landed Coho (Individuals)					At-Sea Observed Coho Bycatch Weight (mt)	At-Sea Unknown Coho Bycatch Estimate Weight (mt)	Landed Coho Weight (mt)
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	228	--	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Winter	0-125	105	9	--	--	--	--	9	0.02	--	--	0.02
2013	South of Cape Mendocino, CA	Summer	0-125	511	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	0-125	307	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	125-250	1012	1	0	--	--	--	1	0.00	0.00	--	0.00
2014	North of Cape Falcon, OR	Winter	250+	1251	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Summer	0-125	2113	4	0	--	--	4	0.00	0.00	--	--	0.00
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1523	10	0	--	--	10	0.02	0.00	--	--	0.02
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1569	1	0	--	--	1	0.00	0.00	--	--	0.00
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	338	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1725	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	325	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	962	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	0-125	287	2	0	--	--	2	0.01	0.00	--	--	0.01
2014	South of Cape Mendocino, CA	Winter	125-250	219	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	250+	621	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Summer	0-125	314	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	0-125	208	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	125-250	1785	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	250+	1151	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	0-125	2316	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	125-250	370	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1789	1	0	--	--	1	0.00	0.00	--	--	0.00
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1541	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	250	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	449	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1440	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250	582	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Winter	0-125	115	--	--	--	--	--	--	--	--	--	--

Table 16b (continued). Observed at-sea, estimated unknown, landed, and total coho salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet	At-Sea			At-Sea Observed Coho Bycatch (Individuals)	At-Sea Unknown Coho Bycatch (Individuals)	Landed Coho (Individuals)	Total Coho Individuals	At-Sea Observed Coho Bycatch Weight (mt)	At-Sea		
					Groundfish Landings (mt)	Coho Bycatch (Individuals)	Estimate (Individuals)						At-Sea Unknown Coho Bycatch (Individuals)	Estimate Weight (mt)	Landed Coho Weight (mt)
2015	South of Cape Mendocino, CA	Winter	125-250		138	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Summer	0-125		211	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	0-125		283	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	125-250		1633	1	0	--	--	1	0.00	0.00	--	--	0.00
2016	North of Cape Falcon, OR	Winter	250+		1113	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	0-125		2598	2	0	--	--	2	0.00	0.00	--	--	0.00
2016	North of Cape Falcon, OR	Summer	125-250		403	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	250+		240	4	0	--	--	4	0.01	0.00	--	--	0.01
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250		1908	2	0	--	--	2	0.00	0.00	--	--	0.00
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250		465	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+		958	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	0-250		25	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	250+		125	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Summer	0-250		142	--	--	--	--	--	--	--	--	--	--

Table 16c. Observed at-sea, estimated unknown, landed, and total pink salmon bycatch in the catch shares non-hake bottom trawl fishery, including non-hake midwater trawl in 2011 and LE California halibut in 2011 to 2013.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea			Landed Pink Individuals	Total Pink Individuals	At-Sea			Landed Pink Weight (mt)	Total Pink Weight (mt)
					At-Sea Observed Pink Bycatch (Individuals)	Unknown Pink Bycatch Estimate (Individuals)	Landed Pink (Individuals)			At-Sea Observed Pink Bycatch Weight (mt)	Unknown Pink Bycatch Estimate Weight (mt)	Landed Pink Weight (mt)		
2011	North of Cape Falcon, OR	Winter	0-125	336	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Winter	125-250	1099	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	0-125	1704	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	125-250	1292	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	250+	701	--	--	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	898	--	--	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1617	--	--	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	544	--	--	--	--	--	--	--	--	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	288	--	--	--	--	--	--	--	--	--	--
2011	South of Cape Mendocino, CA	Summer	0-125	386	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	0-125	207	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	125-250	1388	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	250+	1337	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	0-125	2675	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	125-250	928	--	--	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1054	2	0	--	--	2	0.00	0.00	--	--	0.00
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1655	--	--	--	--	--	--	--	--	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	220	--	--	--	--	--	--	--	--	--	--
2012	South of Cape Mendocino, CA	Winter	0-125	44	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	0-125	318	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	125-250	1848	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	250+	1392	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Summer	0-125	2445	--	--	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1591	--	--	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1839	--	--	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	158	--	--	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	355	--	--	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1320	--	--	--	--	--	--	--	--	--	--

Table 16c (continued). Observed at-sea, estimated unknown, landed, and total pink salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet	At-Sea			At-Sea Observed Pink Bycatch (Individuals)	At-Sea Unknown Pink Bycatch Estimate (Individuals)	Landed Pink (Individuals)	Total Pink Individuals	At-Sea		
					Groundfish Landings (mt)	Pink Bycatch (Individuals)	Landed Pink Weight (mt)					At-Sea Observed Pink Bycatch Estimate Weight (mt)	Landed Pink Weight (mt)	Total Pink Weight (mt)
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125		228	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Winter	0-125		105	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Summer	0-125		511	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	0-125		307	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	125-250		1012	2	0	--	--	2	0.00	0.00	--	0.00
2014	North of Cape Falcon, OR	Winter	250+		1251	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Summer	0-125		2113	--	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250		1523	--	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	250+		1569	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250		338	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+		1725	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125		325	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+		962	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	0-125		287	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	125-250		219	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	250+		621	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Summer	0-125		314	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	0-125		208	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	125-250		1785	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	250+		1151	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	0-125		2316	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	125-250		370	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250		1789	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	250+		1541	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250		250	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250		449	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+		1440	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250		582	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Winter	0-125		115	--	--	--	--	--	--	--	--	--

Table 16c (continued). Observed at-sea, estimated unknown, landed, and total pink salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet	At-Sea			At-Sea Observed Pink Bycatch (Individuals)	At-Sea Unknown Pink Bycatch Estimate (Individuals)	Landed Pink (Individuals)	Total Pink Individuals	At-Sea			
					Groundfish Landings (mt)	Pink Bycatch (Individuals)	Landed Pink (Individuals)					At-Sea Observed Pink Bycatch Weight (mt)	At-Sea Unknown Pink Bycatch Estimate Weight (mt)	Landed Pink Weight (mt)	Total Pink Weight (mt)
2015	South of Cape Mendocino, CA	Winter	125-250		138	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Summer	0-125		211	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	0-125		283	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	125-250		1633	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	250+		1113	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	0-125		2598	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	125-250		403	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	250+		240	--	--	--	--	--	--	--	--	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250		1908	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250		465	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+		958	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	0-250		25	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	250+		125	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Summer	0-250		142	--	--	--	--	--	--	--	--	--	--

Table 16d. Observed at-sea, estimated unknown, landed, and total sockeye salmon bycatch in the catch shares non-hake bottom trawl fishery, including non-hake midwater trawl in 2011 and LE California halibut in 2011 to 2013.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea Unknown Sockeye Bycatch Estimate (Individuals)			Landed Sockeye Individuals	Total Sockeye Individuals	At-Sea Observed Sockeye Bycatch Weight (mt)	At-Sea Unknown Sockeye Bycatch Estimate (Individuals)			Landed Sockeye Weight (mt)	Total Sockeye Weight (mt)
					At-Sea Observed Sockeye Bycatch (Individuals)	Unknown Sockeye Bycatch (Individuals)	Landed Sockeye Individuals				At-Sea Observed Sockeye Bycatch Weight (mt)	Unknown Sockeye Bycatch Estimate (Individuals)	Landed Sockeye Weight (mt)		
2011	North of Cape Falcon, OR	Winter	0-125	336	--	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Winter	125-250	1099	--	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	0-125	1704	--	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	125-250	1292	--	--	--	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	250+	701	1	0	--	--	1	0.00	0.00	--	--	0.00	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	898	--	--	--	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1617	--	--	--	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	544	--	--	--	--	--	--	--	--	--	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	288	--	--	--	--	--	--	--	--	--	--	--
2011	South of Cape Mendocino, CA	Summer	0-125	386	--	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	0-125	207	--	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	125-250	1388	--	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	250+	1337	--	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	0-125	2675	--	--	--	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	125-250	928	--	--	--	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1054	--	--	--	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1655	--	--	--	--	--	--	--	--	--	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	220	--	--	--	--	--	--	--	--	--	--	--
2012	South of Cape Mendocino, CA	Winter	0-125	44	--	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	0-125	318	--	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	125-250	1848	--	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	250+	1392	--	--	--	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Summer	0-125	2445	--	--	--	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1591	--	--	--	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1839	--	--	--	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	158	--	--	--	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	355	--	--	--	--	--	--	--	--	--	--	--

Table 16d (continued). Observed at-sea, estimated unknown, landed, and total sockeye salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (ft/h)	Fleet	At-Sea Unknown Sockeye Bycatch Estimate			Total Sockeye Individuals	At-Sea Observed Sockeye Bycatch Weight (mt)	At-Sea Unknown Sockeye Bycatch Estimate			Landed Sockeye Weight (mt)	Total Sockeye Weight (mt)
					Observed Sockeye Bycatch (Individuals)	(Individuals)	Landed Sockeye Individuals			Weight (mt)	Weight (mt)	Landed Sockeye Weight (mt)		
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1320	--	--	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	228	--	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Winter	0-125	105	--	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Summer	0-125	511	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	0-125	307	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	125-250	1012	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	250+	1251	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Summer	0-125	2113	--	--	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1523	--	--	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1569	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	338	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1725	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	325	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	962	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	0-125	287	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	125-250	219	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	250+	621	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Summer	0-125	314	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	0-125	208	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	125-250	1785	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	250+	1151	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	0-125	2316	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	125-250	370	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1789	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1541	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	250	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	449	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1440	--	--	--	--	--	--	--	--	--	--

Table 16d (continued). Observed at-sea, estimated unknown, landed, and total sockeye salmon bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (ft/h)	Fleet	At-Sea Unknown Sockeye Bycatch Estimate			Total Sockeye Individuals	At-Sea Observed Sockeye Bycatch Weight (mt)	At-Sea Unknown Sockeye Bycatch Estimate			Landed Sockeye Weight (mt)	Total Sockeye Weight (mt)
					At-Sea Observed Sockeye Bycatch (Individuals)	(Individuals)	Landed Sockeye (Individuals)			At-Sea Observed Sockeye Bycatch Weight (mt)	Weight (mt)	Landed Sockeye Weight (mt)		
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250	582	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Winter	0-125	115	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Winter	125-250	138	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Summer	0-125	211	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	0-125	283	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	125-250	1633	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	250+	1113	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	0-125	2598	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	125-250	403	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	250+	240	--	--	--	--	--	--	--	--	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1908	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	465	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	958	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	0-250	25	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	250+	125	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Summer	0-250	142	--	--	--	--	--	--	--	--	--	--

Table 16e. Observed at-sea, estimated unknown, landed, and total unspecified bycatch in the catch shares non-hake bottom trawl fishery, including non-hake midwater trawl in 2011 and LE California halibut in 2011 to 2013.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea			Total Unspecified Individuals	At-Sea			Total Unspecified Weight (mt)
					At-Sea Observed Unspecified Bycatch (Individuals)	Unknown Unspecified Bycatch Estimate (Individuals)	Landed Unspecified Individuals		At-Sea Observed Unspecified Bycatch Weight (mt)	Unknown Unspecified Bycatch Estimate (mt)	Landed Unspecified Weight (mt)	
2011	North of Cape Falcon, OR	Winter	0-125	336	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Winter	125-250	1099	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	0-125	1704	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	125-250	1292	--	--	--	--	--	--	--	--
2011	North of Cape Falcon, OR	Summer	250+	701	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	898	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1617	--	--	--	--	--	--	--	--
2011	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	544	--	--	--	--	--	--	--	--
2011	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	288	--	--	--	--	--	--	--	--
2011	South of Cape Mendocino, CA	Summer	0-125	386	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	0-125	207	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	125-250	1388	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Winter	250+	1337	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	0-125	2675	--	--	--	--	--	--	--	--
2012	North of Cape Falcon, OR	Summer	125-250	928	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1054	--	--	--	--	--	--	--	--
2012	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1655	--	--	--	--	--	--	--	--
2012	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	220	2	0	--	2	0.00	0.00	--	0.00
2012	South of Cape Mendocino, CA	Winter	0-125	44	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	0-125	318	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	125-250	1848	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Winter	250+	1392	--	--	--	--	--	--	--	--
2013	North of Cape Falcon, OR	Summer	0-125	2445	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1591	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1839	--	--	--	--	--	--	--	--
2013	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	158	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	125-250	355	--	--	--	--	--	--	--	--

Table 16e (continued). Observed at-sea, estimated unknown, landed, and total unspecified bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (fth)	Fleet Groundfish Landings (mt)	At-Sea			Landed Unspecified Individuals	Total Unspecified Individuals	At-Sea			Landed Unspecified Weight (mt)	Total Unspecified Weight (mt)
					At-Sea Observed Unspecified Bycatch (Individuals)	Unknown Unspecified Bycatch Estimate (Individuals)	At-Sea Observed Unspecified Bycatch Weight (mt)			At-Sea Unknown Unspecified Bycatch Estimate (mt)	At-Sea Unknown Unspecified Bycatch Weight (mt)			
2013	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1320	--	--	--	--	--	--	--	--	--	--
2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	228	--	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Winter	0-125	105	--	--	--	--	--	--	--	--	--	--
2013	South of Cape Mendocino, CA	Summer	0-125	511	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	0-125	307	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	125-250	1012	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Winter	250+	1251	--	--	--	--	--	--	--	--	--	--
2014	North of Cape Falcon, OR	Summer	0-125	2113	--	--	--	--	--	--	--	--	--	--
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1523	1	0	--	--	1	0.00	0.00	--	--	0.00
2014	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1569	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	338	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1725	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	325	--	--	--	--	--	--	--	--	--	--
2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	250+	962	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	0-125	287	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	125-250	219	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Winter	250+	621	--	--	--	--	--	--	--	--	--	--
2014	South of Cape Mendocino, CA	Summer	0-125	314	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	0-125	208	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	125-250	1785	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Winter	250+	1151	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	0-125	2316	--	--	--	--	--	--	--	--	--	--
2015	North of Cape Falcon, OR	Summer	125-250	370	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	0-250	1789	4	0	--	--	4	0.01	0.00	--	--	0.01
2015	Cape Falcon, OR to Cape Blanco, OR	Winter	250+	1541	--	--	--	--	--	--	--	--	--	--
2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125-250	250	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	449	--	--	--	--	--	--	--	--	--	--
2015	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	1440	--	--	--	--	--	--	--	--	--	--

Table 16e (continued). Observed at-sea, estimated unknown, landed, and total unspecified bycatch in the catch shares non-hake bottom trawl fishery.

Year	Area	Season	Depth Interval (ft/h)	Fleet	At-Sea			At-Sea			At-Sea Unspecified Bycatch Estimate Weight (mt)	At-Sea Unspecified Bycatch Estimate Weight (mt)	Landed Unspecified Weight (mt)	Total Unspecified Weight (mt)	
					At-Sea Observed Unspecified Bycatch (Individuals)	Unknown Unspecified Bycatch (Individuals)	Landed Unspecified (Individuals)	Total Unspecified Individuals	At-Sea Observed Unspecified Bycatch (Individuals)	Total Unspecified Weight (mt)					
2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-250	582	--	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Winter	0-125	115	--	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Winter	125-250	138	--	--	--	--	--	--	--	--	--	--	--
2015	South of Cape Mendocino, CA	Summer	0-125	211	--	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	0-125	283	--	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	125-250	1633	--	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Winter	250+	1113	--	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	0-125	2598	--	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	125-250	403	--	--	--	--	--	--	--	--	--	--	--
2016	North of Cape Falcon, OR	Summer	250+	240	--	--	--	--	--	--	--	--	--	--	--
2016	Cape Falcon, OR to Cape Blanco, OR	Winter	125-250	1908	--	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	0-250	465	--	--	--	--	--	--	--	--	--	--	--
2016	Cape Blanco, OR to Cape Mendocino, CA	Winter	250+	958	--	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	0-250	25	--	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Winter	250+	125	--	--	--	--	--	--	--	--	--	--	--
2016	South of Cape Mendocino, CA	Summer	0-250	142	--	--	--	--	--	--	--	--	--	--	--

Table 17. Observed vessels, trips, hauls, catch, and salmon, as well as fleet landings, stratified by year, target strategy, season, and salmon management area for shoreside catch shares midwater trawl. Data from non-hake midwater trawl in 2011 is include in Tables 15 and 16 to mantain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targetted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	Fleet Targeted Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	4	9	35	6	17
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	6	22	77	11	14
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	9	34	133	76	57
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	4	9	19	13	68
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	25	593	1147	687	60
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	3	12	25	14	56
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	21	307	525	173	33
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	14	61	141	125	89
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	21	337	815	210	26
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	14	54	74	52	70
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	21	294	568	232	41
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	16	191	395	120	30
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	8	20	52	51	98
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	24	743	1267	358	28
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	6	10	19	4	21
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	11	19	30	20	67
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	19	283	566	312	55
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	11	26	54	33	61
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	23	627	1028	577	56
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	11	26	43	14	33
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	103	4	8	26	11	42
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	865	5	35	120	74	62
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	4	16	49	14	29
Midwater Hake	2015	North of Cape Falcon, OR	Summer	1708	5	28	62	34	55
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	9592	5	111	225	90	40
Midwater Hake	2016	Coastwide	Summer	8970	4	97	207	56	27

Table 18a. Observed at-sea, estimated unknown, landed, and total Chinook salmon bycatch in the catch shares midwater trawl fishery. Data from non-hake midwater trawl in 2011 are included in Tables 15 and 16 to maintain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targeted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	Fleet Targeted	At-Sea Observed Chinook Bycatch		At-Sea Unknown Chinook Bycatch Estimate		Landed Chinook	Total Chinook	At-Sea Observed Chinook Bycatch	At-Sea Unknown Chinook Bycatch		Landed Chinook	Total Chinook
				Landings (mt)	(Individuals)		(Individuals)	(Individuals)	(Individuals)	Weight (mt)	Estimate Weight (mt)	Weight (mt)		Weight (mt)	Weight (mt)
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	4	--			8	12	0.01	--		0.02	0.03
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	10	21			40	71	0.03	0.08		0.15	0.26
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	--	--			661	661	--	--		1.30	1.30
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	--	--			30	30	--	--		0.10	0.10
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	--	--			2763	2763	--	--		7.92	7.92
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	--	--			72	72	--	--		0.23	0.23
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	11	3			843	857	0.05	0.01		3.71	3.77
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	2	16			983	1001	0.01	0.04		2.55	2.60
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	4	22			373	399	0.02	0.08		1.43	1.53
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	3	--			403	406	0.01	--		1.03	1.03
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	--	--			553	553	--	--		2.23	2.23
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	11	--			124	135	0.04	--		0.55	0.59
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	--	--			403	403	--	--		1.26	1.26
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	12	6			704	722	0.04	0.02		2.63	2.69
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	--	--			3	3	--	--		0.01	0.01
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	--	--			95	95	--	--		0.25	0.25
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	72	31			638	741	0.08	0.14		3.21	3.44
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	--	--			777	777	--	--		1.82	1.82
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	39	31			5187	5258	0.10	0.07		12.23	12.40
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	--	--			27	27	--	--		0.07	0.07
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	865	--	--			17	17	--	--		0.05	0.05
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	103	50	0			97	147	0.22	0.00		0.43	0.65
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	--	--			7	7	--	--		0.02	0.02
Midwater Hake	2015	North of Cape Falcon, OR	Summer	9592	1	0			29	30	0.01	0.00		0.12	0.13
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	1708	--	4			133	137	--	0.02		0.53	0.55
Midwater Hake	2016	Coastwide	Summer	8970	--	--			101	101	--	--		0.56	0.56

Table 18b. Observed at-sea, estimated unknown, landed, and total chum salmon bycatch in the catch shares midwater trawl fishery. Data from non-hake midwater trawl in 2011 are included in Tables 15 and 16 to maintain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targeted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	At-Sea					At-Sea				
				Fleet Targeted Landings (mt)	Chum Bycatch (Individuals)	Unknown Chum Bycatch		Landed Chum (Individuals)	Total Chum Individuals	At-Sea Observed Chum Bycatch Weight (mt)	Estimate Weight (mt)	Unknown Chum Bycatch	
						At-Sea Observed Chum Bycatch (Individuals)	At-Sea Unknown Chum Bycatch (Individuals)					At-Sea Chum Bycatch Weight (mt)	Estimate Weight (mt)
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	--	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	1	0	--	1	0.00	0.00	--	--	0.01
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	--	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	--	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	--	--	41	41	--	--	--	0.16	0.16
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	--	--	--	--	--	--	--	--	--
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	--	0	1	1	--	0.00	0.00	0.00	0.00
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	--	--	--	--	--	--	--	--	--
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	--	0	3	3	--	0.00	0.01	0.01	0.01
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	--	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	--	--	0	0	--	--	--	0.00	0.00
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	--	--	6	6	--	--	--	0.03	0.03
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	--	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	--	0	1	1	--	0.00	0.01	0.01	0.01
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	--	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	--	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	--	0	4	4	--	0.00	0.03	0.03	0.03
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	--	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	--	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	--	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	865	--	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	103	--	--	--	--	--	--	--	--	--
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	--	--	--	--	--	--	--	--	--
Midwater Hake	2015	North of Cape Falcon, OR	Summer	9592	--	0	1	1	--	0.00	0.01	0.01	0.01
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	1708	--	--	--	--	--	--	--	--	--
Midwater Hake	2016	Coastwide	Summer	8970	--	--	1	1	--	--	0.00	0.00	0.00

Table 18c. Observed at-sea, estimated unknown, landed, and total coho salmon bycatch in the catch shares midwater trawl fishery. Data from non-hake midwater trawl in 2011 are included in Tables 15 and 16 to maintain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targeted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	At-Sea				At-Sea			
				Fleet Targeted Landings (mt)	Coho Bycatch (Individuals)	At-Sea Observed Coho Bycatch Estimate (Individuals)	Landed Coho (Individuals)	Total Coho Individuals	Coho Bycatch Weight (mt)	At-Sea Observed Coho Bycatch Estimate (mt)	Landed Coho Weight (mt)
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	--	--	12	12	--	--	0.04
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	--	--	129	129	--	--	0.39
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	--	--	--	--	--	--	--
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	--	0	7	7	--	0.00	0.03
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	--	0	6	6	--	0.00	0.01
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	--	0	8	8	--	0.00	0.02
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	--	--	1	1	--	--	0.01
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	--	--	10	10	--	--	0.03
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	--	0	23	23	--	0.00	0.10
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	--	4	80	84	--	0.01	0.20
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	--	--	8	8	--	--	0.01
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	--	0	74	74	--	0.00	0.18
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	--	--	1	1	--	--	0.00
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	865	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	103	--	0	3	3	--	0.00	0.01
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	--	--	--	--	--	--	--
Midwater Hake	2015	North of Cape Falcon, OR	Summer	9592	--	--	--	--	--	--	--
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	1708	--	--	--	--	--	--	--
Midwater Hake	2016	Coastwide	Summer	8970	--	--	1	1	--	--	0.00

Table 18d. Observed at-sea, estimated unknown, landed, and total pink salmon bycatch in the catch shares midwater trawl fishery. Data from non-hake midwater trawl in 2011 are included in Tables 15 and 16 to maintain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targeted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	At-Sea				At-Sea				
				Fleet Targeted Landings (mt)	At-Sea Observed Pink Bycatch (Individuals)	Unknown Pink Bycatch Estimate (Individuals)	Landed Pink (Individuals)	Total Pink Individuals	At-Sea Observed Pink Bycatch Weight (mt)	Unknown Pink Bycatch Estimate Weight (mt)	Landed Pink Weight (mt)	Total Pink Weight (mt)
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	3	--	6110	6113	0.01	--	11.48	11.49
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	--	--	--	--	--	--	--	--
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	--	--	--	--	--	--	--	--
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	--	--	--	--	--	--	--	--
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	--	--	--	--	--	--	--	--
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	--	--	2	2	--	--	0.00	0.00
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	--	--	--	--	--	--	--	--
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	865	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	103	--	--	--	--	--	--	--	--
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	--	--	--	--	--	--	--	--
Midwater Hake	2015	North of Cape Falcon, OR	Summer	9592	--	--	--	--	--	--	--	--
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	1708	--	--	--	--	--	--	--	--
Midwater Hake	2016	Coastwide	Summer	8970	--	--	--	--	--	--	--	--

Table 18e. Observed at-sea, estimated unknown, landed, and total sockeye salmon bycatch in the catch shares midwater trawl fishery. Data from non-hake midwater trawl in 2011 are included in Tables 15 and 16 to maintain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targeted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	Fleet Targeted	At-Sea Observed Sockeye Bycatch (Individuals)	At-Sea Unknown Sockeye Bycatch Estimate (Individuals)	Landed Sockeye (Individuals)	Total Sockeye Individuals	At-Sea Observed Sockeye Bycatch Weight (mt)	At-Sea Unknown Sockeye Bycatch Estimate Weight (mt)	Landed Sockeye Weight (mt)	Total Sockeye Weight (mt)
				Landings (mt)								
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	--	--	2	2	--	--	0.00	0.00
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	--	--	--	--	--	--	--	--
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	--	--	--	--	--	--	--	--
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	--	--	--	--	--	--	--	--
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	--	--	--	--	--	--	--	--
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	--	--	--	--	--	--	--	--
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	--	0	1	1	--	0.00	0.00	0.00
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	865	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	103	--	--	--	--	--	--	--	--
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	--	--	--	--	--	--	--	--
Midwater Hake	2015	North of Cape Falcon, OR	Summer	9592	--	--	--	--	--	--	--	--
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	1708	--	--	--	--	--	--	--	--
Midwater Hake	2016	Coastwide	Summer	8970	--	--	--	--	--	--	--	--

Table 18f. Observed at-sea, estimated unknown, landed, and total unspecified bycatch in the catch shares midwater trawl fishery. Data from non-hake midwater trawl in 2011 are included in Tables 15 and 16 to maintain confidentiality. Targeted landings for non-hake and rockfish midwater trawl include all non-hake groundfish retained; targeted landings for shoreside hake and midwater hake include hake retained. In 2015, the basis of the definition for shoreside midwater changed from the captain's stated target to the proportion hake landed.

Sector	Year	Area	Season	Fleet Targeted	At-Sea			Total	At-Sea			Total
				Landings (mt)	Observed Unspecified Bycatch (Individuals)	At-Sea Unknown Unspecified Bycatch Estimate (Individuals)	Landed Unspecified (Individuals)		Observed Unspecified Bycatch Weight (mt)	At-Sea Unknown Unspecified Bycatch Weight (mt)	Landed Unspecified Weight (mt)	
CS - Non-Hake Midwater Trawl	2012	North of Cape Blanco, OR	All Year	198	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2013	North of Cape Blanco, OR	All Year	405	--	--	--	--	--	--	--	--
CS - Non-Hake Midwater Trawl	2014	North of Cape Blanco, OR	All Year	874	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Winter	717	--	--	--	--	--	--	--	--
Shoreside Hake	2011	North of Cape Falcon, OR	Summer	63246	--	--	--	--	--	--	--	--
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Winter	1292	--	--	--	--	--	--	--	--
Shoreside Hake	2011	Cape Falcon, OR to Cape Blanco, OR	Summer	25503	--	--	--	--	--	--	--	--
Shoreside Hake	2012	North of Cape Falcon, OR	Winter	6126	1	0	--	1	0.00	0.00	--	0.00
Shoreside Hake	2012	North of Cape Falcon, OR	Summer	31744	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Winter	4234	--	--	--	--	--	--	--	--
Shoreside Hake	2012	Cape Falcon, OR to Cape Blanco, OR	Summer	23222	1	--	--	1	0.00	--	--	0.00
Shoreside Hake	2013	North of Cape Falcon, OR	Summer	20581	--	--	--	--	--	--	--	--
Shoreside Hake	2013	North of Cape Blanco, OR	Winter	2110	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Falcon, OR to Cape Blanco, OR	Summer	72922	--	--	--	--	--	--	--	--
Shoreside Hake	2013	Cape Blanco, OR to Cape Mendocino, CA	Summer	1093	--	--	--	--	--	--	--	--
Shoreside Hake	2014	North of Cape Falcon, OR	Winter	1287	12	--	--	12	0.03	--	--	0.03
Shoreside Hake	2014	North of Cape Falcon, OR	Summer	31529	19	1	--	20	0.05	0.00	--	0.05
Shoreside Hake	2014	South of Cape Falcon, OR	Winter	2665	--	--	--	--	--	--	--	--
Shoreside Hake	2014	Cape Falcon, OR to Cape Blanco, OR	Summer	59509	1	0	--	1	0.00	0.00	--	0.00
Shoreside Hake	2014	Cape Blanco, OR to Cape Mendocino, CA	Summer	2845	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Winter	865	--	--	--	--	--	--	--	--
Midwater Rockfish	2015	North of Cape Blanco, OR	Summer	103	--	--	--	--	--	--	--	--
Midwater Rockfish	2016	North of Cape Blanco, OR	All Year	375	--	--	--	--	--	--	--	--
Midwater Hake	2015	North of Cape Falcon, OR	Summer	9592	--	--	--	--	--	--	--	--
Midwater Hake	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	1708	--	--	--	--	--	--	--	--
Midwater Hake	2016	Coastwide	Summer	8970	--	--	--	--	--	--	--	--

Table 19. Observed vessels, trips, hauls, catch, and salmon interactions, as well as fleet landings, for the CS hook-and-line fishery.

Year	Fleet Sablefish Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
2011	302	11	92	620	--	--
2012	206	8	32	506	--	--
2013	66	8	29	215	--	--
2014	75	8	31	227	10	4
2015	121	5	16	185	--	--
2016	162	5	30	351	--	--

Table 20. Observed at-sea, estimated unknown, landed, and total salmon bycatch in the CS hook-and-line fishery.

Year	Fleet Sablefish Landings (mt)	At-Sea Unknown Coho Bycatch Estimate (Individuals)			Total Coho Individuals	At-Sea Unknown Observed Coho Bycatch Weight Estimate (mt)			Landed Coho Weight (mt)	Total Coho Weight (mt)
		At- Sea Observed Coho Bycatch (Individuals)	Coho Bycatch Estimate (Individuals)	Landed Coho (Individuals)		At-Sea Coho Bycatch Weight (mt)	At-Sea Coho Bycatch Weight (mt)			
2014	75	14	1	--	15	0.06	0.01	--	--	0.06

Table 21. Effort in the electronically monitored (EM) portion of the shoreside catch shares trawl fleet, based on EM, logbook, and fish ticket data. Targeted landings for bottom trawl EM and midwater rockfish EM include all non-hake groundfish retained; targeted landings for midwater hake EM include hake retained.

Sector	Year	Area	Season	Depth Interval (fth)	Targeted Landings (mt)	Observed Vessels	Observed Trips	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
Bottom Trawl EM	2015	Coastwide	All Year	All Depths	405	5	23	4	17
Bottom Trawl EM	2016	Coastwide	All Year	All Depths	1759	7	99	12	12
Midwater Hake EM	2015	North of Cape Falcon, OR	Winter	125+	1164	7	18	15	83
Midwater Hake EM	2015	North of Cape Falcon, OR	Summer	0-125	2179	10	32	23	72
Midwater Hake EM	2015	North of Cape Falcon, OR	Summer	125+	4409	15	70	39	56
Midwater Hake EM	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	6675	15	109	64	59
Midwater Hake EM	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125+	31676	16	340	145	43
Midwater Hake EM	2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	125+	337	3	5	5	100
Midwater Hake EM	2016	North of Cape Falcon, OR	Winter	0-125	105	1	1	--	--
Midwater Hake EM	2016	North of Cape Falcon, OR	Winter	125+	465	4	4	1	25
Midwater Hake EM	2016	North of Cape Falcon, OR	Summer	0-125	47415	19	397	146	37
Midwater Hake EM	2016	North of Cape Falcon, OR	Summer	125+	10655	16	114	46	40
Midwater Hake EM	2016	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	6632	12	77	49	64
Midwater Hake EM	2016	Cape Falcon, OR to Cape Blanco, OR	Summer	125+	8029	12	106	24	23
Midwater Hake EM	2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	1950	8	21	4	19
Midwater Hake EM	2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	125+	1162	9	17	2	12
Midwater Rockfish EM	2015	North of Cape Blanco, OR	Winter	0-125	263	6	9	8	89
Midwater Rockfish EM	2015	North of Cape Blanco, OR	Summer	0-125	531	4	17	16	94
Midwater Rockfish EM	2016	North of Cape Blanco, OR	Winter	0-125	266	5	9	--	--
Midwater Rockfish EM	2016	North of Cape Blanco, OR	Summer	0-125	502	4	21	13	62

Table 22. Salmon bycatch EM portion of the shoreside catch shares trawl fleet, based on EM, logbook, and fish ticket data. Targeted landings for bottom trawl EM and midwater rockfish EM include all non-hake groundfish retained; targeted landings for midwater hake EM include hake retained. All salmon are required to be retained and sampled by shoreside catch monitors.

Sector	Year	Area	Season	Depth Interval (fth)	Targeted Landings (mt)	Chinook Individuals	Chinook Weight (mt)	Chum Individuals	Chum Weight (mt)	Coho Individuals	Coho Weight (mt)
Catch Shares EM	2015	Coastwide	All Year	All Depths	405	5	0.03	--	--	--	--
Catch Shares EM	2016	Coastwide	All Year	All Depths	1759	151	0.33	--	--	--	--
Midwater Hake EM	2015	North of Cape Falcon, OR	Winter	125+	1164	139	0.46	--	--	--	--
Midwater Hake EM	2015	North of Cape Falcon, OR	Summer	0-125	2179	63	0.34	3	0.01	1	0.00
Midwater Hake EM	2015	North of Cape Falcon, OR	Summer	125+	4409	141	0.79	1	0.01	1	0.00
Midwater Hake EM	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	6675	241	1.15	--	--	3	0.00
Midwater Hake EM	2015	Cape Falcon, OR to Cape Blanco, OR	Summer	125+	31676	1237	4.93	2	0.01	4	0.01
Midwater Hake EM	2015	Cape Blanco, OR to Cape Mendocino, CA	Summer	125+	337	14	0.04	--	--	--	--
Midwater Hake EM	2016	North of Cape Falcon, OR	Winter	125+	465	1	0.00	1	0.00	--	--
Midwater Hake EM	2016	North of Cape Falcon, OR	Summer	0-125	47415	211	1.57	14	0.05	2	0.01
Midwater Hake EM	2016	North of Cape Falcon, OR	Summer	125+	10655	46	0.33	5	0.03	1	0.00
Midwater Hake EM	2016	Cape Falcon, OR to Cape Blanco, OR	Summer	0-125	6632	251	1.09	--	--	--	--
Midwater Hake EM	2016	Cape Falcon, OR to Cape Blanco, OR	Summer	125+	8029	106	0.34	--	--	1	0.00
Midwater Hake EM	2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	0-125	1950	21	0.13	--	--	--	--
Midwater Hake EM	2016	Cape Blanco, OR to Cape Mendocino, CA	Summer	125+	1162	2	0.02	--	--	--	--
Midwater Rockfish EM	2015	North of Cape Blanco, OR	Winter	0-125	263	135	0.44	1	0.00	2	0.01
Midwater Rockfish EM	2015	North of Cape Blanco, OR	Summer	0-125	531	183	0.81	4	0.01	2	0.01
Midwater Rockfish EM	2016	North of Cape Blanco, OR	Summer	0-125	502	40	0.18	--	--	--	--

Table 23. Observed vessels, hauls, and salmon interactions, as well as fleet landings, stratified by sector, year, and season for the at-sea hake fishery.

Sector	Year	Season	Fleet Hake Landings (mt)	Observed Vessels	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
Catcher Processor	2002	All Year	36333	5	559	98	18
Catcher Processor	2003	Spring	14524	4	308	72	23
Catcher Processor	2003	Fall	26945	3	460	16	3
Catcher Processor	2004	Spring	25300	6	611	96	16
Catcher Processor	2004	Fall	47559	5	890	16	2
Catcher Processor	2005	Spring	38056	6	728	216	30
Catcher Processor	2005	Fall	40442	5	609	4	1
Catcher Processor	2006	Spring	46665	9	937	22	2
Catcher Processor	2006	Fall	31581	6	560	--	--
Catcher Processor	2007	Spring	42149	9	992	137	14
Catcher Processor	2007	Fall	30749	5	585	29	5
Catcher Processor	2008	Spring	41769	8	784	53	7
Catcher Processor	2008	Fall	65985	6	1102	49	4
Catcher Processor	2009	All Year	34591	5	868	9	1
Catcher Processor	2010	All Year	54217	6	1068	74	7
Catcher Processor	2011	Spring	26261	7	517	58	11
Catcher Processor	2011	Fall	45076	9	1032	272	26
Catcher Processor	2012	Spring	20539	7	400	121	30
Catcher Processor	2012	Fall	34983	7	707	163	23
Catcher Processor	2013	Spring	28184	8	520	46	9
Catcher Processor	2013	Fall	49821	7	939	157	17
Catcher Processor	2014	Spring	35233	9	666	84	13
Catcher Processor	2014	Fall	67939	9	1030	187	18
Catcher Processor	2015	Spring	42591	9	732	85	12
Catcher Processor	2015	Fall	25844	8	787	97	12
Catcher Processor	2016	Spring	47447	9	872	58	7
Catcher Processor	2016	Fall	61334	9	1333	389	29
Non-Tribal Mothership	2002	Spring	26503	11	574	118	21
Non-Tribal Mothership	2003	Spring	25333	12	536	192	36
Non-Tribal Mothership	2004	Spring	24010	10	571	79	14
Non-Tribal Mothership	2005	Spring	37648	18	855	301	35
Non-Tribal Mothership	2005	Fall	10952	3	185	14	8
Non-Tribal Mothership	2006	Spring	42850	18	999	145	15
Non-Tribal Mothership	2006	Fall	11289	6	284	12	4
Non-Tribal Mothership	2007	All Year	47276	20	1147	147	13
Non-Tribal Mothership	2008	Spring	32484	18	865	47	5
Non-Tribal Mothership	2008	Fall	25203	7	484	24	5
Non-Tribal Mothership	2009	Spring	24066	19	600	74	12
Non-Tribal Mothership	2010	Spring	33518	21	845	137	16
Non-Tribal Mothership	2010	Fall	2209	3	63	--	--
Non-Tribal Mothership	2011	Spring	18463	9	492	77	16

Table 23 (continued). Observed vessels, hauls, and salmon interactions, as well as fleet landings, for the at-sea hake fishery.

Sector	Year	Season	Fleet Hake Landings (mt)	Observed Vessels	Observed Hauls	Observed Hauls that Encountered Salmon	Percent of Observed Hauls that Encountered Salmon
Non-Tribal Mothership	2011	Fall	31508	10	756	123	16
Non-Tribal Mothership	2012	Spring	7031	7	200	26	13
Non-Tribal Mothership	2012	Fall	31011	13	749	278	37
Non-Tribal Mothership	2013	Spring	12938	11	376	29	8
Non-Tribal Mothership	2013	Fall	39410	14	880	168	19
Non-Tribal Mothership	2014	Spring	22934	12	482	54	11
Non-Tribal Mothership	2014	Fall	38860	14	826	217	26
Non-Tribal Mothership	2015	Spring	24365	9	510	52	10
Non-Tribal Mothership	2015	Fall	3180	9	130	14	11
Non-Tribal Mothership	2016	Spring	26892	15	670	43	6
Non-Tribal Mothership	2016	Fall	37706	13	895	98	11
Tribal Mothership	2002	Spring	3923	3	114	33	29
Tribal Mothership	2002	Fall	17706	4	519	139	27
Tribal Mothership	2003	Spring	6276	4	182	129	71
Tribal Mothership	2003	Fall	13155	4	358	251	70
Tribal Mothership	2004	Spring	6458	4	177	95	54
Tribal Mothership	2004	Fall	17054	5	455	235	52
Tribal Mothership	2005	Spring	9288	3	258	165	64
Tribal Mothership	2005	Fall	14274	4	375	194	52
Tribal Mothership	2006	Spring	2730	4	83	44	53
Tribal Mothership	2006	Fall	2675	4	77	22	29
Tribal Mothership	2007	Fall	5129	5	156	73	47
Tribal Mothership	2008	Fall	14977	5	382	38	10
Tribal Mothership	2009	Fall	13469	5	404	87	22
Tribal Mothership	2010	Spring	88	3	4	3	75
Tribal Mothership	2010	Fall	16118	6	512	148	29
Tribal Mothership	2011	Fall	6147	5	228	79	35

Table 24. Observed salmon bycatch in the at-sea hake fishery.

Sector	Year	Season	Fleet Hake	Chinook Individuals	Chinook Weight (mt)	Chum Individuals	Chum Weight (mt)	Coho Individuals	Coho Weight (mt)	Pink Individuals	Pink Weight (mt)	Sockeye Individuals	Sockeye Weight (mt)	Unspecified Individuals	Unspecified Weight (mt)
			Landings (mt)												
Catcher Processor	2002	All Year	36333	954	2.88	14	0.07	69	0.17	--	--	--	--	--	--
Catcher Processor	2003	Spring	14524	508	1.45	8	0.03	--	--	--	--	--	--	--	--
Catcher Processor	2003	Fall	26945	62	0.30	--	--	--	--	13	0.03	--	--	--	--
Catcher Processor	2004	Spring	25300	361	1.67	21	0.07	1	0.00	--	--	--	--	--	--
Catcher Processor	2004	Fall	47559	55	0.27	6	0.02	--	--	--	--	--	--	--	--
Catcher Processor	2005	Spring	38056	1746	5.42	8	0.03	4	0.00	48	0.05	--	--	--	--
Catcher Processor	2005	Fall	40442	8	0.04	--	--	--	--	--	--	--	--	--	--
Catcher Processor	2006	Spring	46665	112	0.61	8	0.04	2	0.01	--	--	--	--	--	--
Catcher Processor	2007	Spring	42149	434	1.62	73	0.26	86	0.16	19	0.02	--	--	--	--
Catcher Processor	2007	Fall	30749	299	0.85	--	--	2	0.00	--	--	--	--	--	--
Catcher Processor	2008	Spring	41769	81	0.41	39	0.11	3	0.00	--	--	2	0.00	2	0.00
Catcher Processor	2008	Fall	65985	412	1.60	4	0.02	--	--	--	--	--	--	16	0.09
Catcher Processor	2009	All Year	34591	22	0.13	--	--	--	--	--	--	--	--	--	--
Catcher Processor	2010	All Year	54217	257	1.20	4	0.01	--	--	--	--	2	0.00	--	--
Catcher Processor	2011	Spring	26261	137	0.57	28	0.06	--	--	10	0.02	--	--	6	0.01
Catcher Processor	2011	Fall	45076	2556	7.10	6	0.02	--	--	--	--	--	--	--	--
Catcher Processor	2012	Spring	20539	407	1.40	51	0.24	12	0.02	22	0.03	--	--	--	--
Catcher Processor	2012	Fall	34983	1521	4.77	--	--	1	0.00	--	--	--	--	--	--
Catcher Processor	2013	Spring	28184	87	0.35	24	0.12	--	--	34	0.04	--	--	1	0.00
Catcher Processor	2013	Fall	49821	1671	4.76	2	0.00	--	--	--	--	--	--	--	--
Catcher Processor	2014	Spring	35233	357	0.73	--	--	6	0.01	--	--	--	--	--	--
Catcher Processor	2014	Fall	67939	3428	9.30	--	--	2	0.01	--	--	--	--	2	0.00
Catcher Processor	2015	Spring	42591	309	0.72	--	--	4	0.01	23	0.02	--	--	--	--
Catcher Processor	2015	Fall	25844	1236	3.51	5	0.02	--	--	--	--	--	--	--	--
Catcher Processor	2016	Spring	47447	107	0.46	30	0.13	2	0.01	--	--	--	--	--	--
Catcher Processor	2016	Fall	61334	2577	8.83	--	--	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2002	Spring	26503	709	2.31	10	0.06	77	0.25	--	--	--	--	3	0.02
Non-Tribal Mothership	2003	Spring	25333	2047	5.52	3	0.01	3	0.01	4	0.00	--	--	186	0.44
Non-Tribal Mothership	2004	Spring	24010	387	1.19	28	0.10	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2005	Spring	37648	2141	6.40	12	0.04	82	0.19	--	--	--	--	--	--
Non-Tribal Mothership	2005	Fall	10952	63	0.38	--	--	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2006	Spring	42850	997	3.82	79	0.43	26	0.08	--	--	--	--	--	--
Non-Tribal Mothership	2006	Fall	11289	83	0.24	--	--	--	--	--	--	--	--	--	--

Table 24 (continued). Observed salmon bycatch in the at-sea hake fishery.

Sector	Year	Season	Fleet Hake		Chum Individuals	Chum Weight (mt)	Coho Individuals	Coho Weight (mt)	Pink Individuals	Pink Weight (mt)	Sockeye Individuals	Sockeye Weight (mt)	Unspecified Individuals	Unspecified Weight (mt)
			Landings (mt)	Chinook Individuals										
Non-Tribal Mothership	2007	All Year	47276	584	1.73	96	0.34	138	0.35	15	0.02	--	--	--
Non-Tribal Mothership	2008	Spring	32484	123	0.53	17	0.07	3	0.00	--	--	--	--	--
Non-Tribal Mothership	2008	Fall	25203	102	0.40	--	--	15	0.04	--	--	--	--	--
Non-Tribal Mothership	2009	Spring	24066	296	1.10	41	0.16	12	0.02	2	0.00	--	--	--
Non-Tribal Mothership	2010	Spring	33518	457	1.68	6	0.02	--	--	--	--	--	2	0.00
Non-Tribal Mothership	2011	Spring	18463	173	0.89	12	0.05	5	0.01	2	0.00	--	--	--
Non-Tribal Mothership	2011	Fall	31508	1123	3.41	--	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2012	Spring	7031	52	0.18	2	0.01	4	0.01	--	--	--	--	--
Non-Tribal Mothership	2012	Fall	31011	2229	6.66	--	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2013	Spring	12938	92	0.43	--	--	2	0.00	2	0.00	--	--	--
Non-Tribal Mothership	2013	Fall	39410	1889	5.42	--	--	4	0.02	1	0.00	--	--	--
Non-Tribal Mothership	2014	Spring	22934	618	1.34	2	0.01	8	0.03	--	--	--	--	--
Non-Tribal Mothership	2014	Fall	38860	2292	5.13	2	0.01	88	0.15	--	--	--	--	--
Non-Tribal Mothership	2015	Spring	24365	131	0.57	--	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2015	Fall	3180	130	0.23	--	--	--	--	--	--	--	--	--
Non-Tribal Mothership	2016	Spring	26892	72	0.53	9	0.05	--	--	--	--	4	0.01	--
Non-Tribal Mothership	2016	Fall	37706	295	1.11	2	0.01	--	--	--	--	2	0.00	--
Tribal Mothership	2002	Spring	3923	232	0.84	33	0.16	--	--	--	--	--	--	--
Tribal Mothership	2002	Fall	17706	772	2.48	18	0.07	23	0.05	--	--	--	--	1
Tribal Mothership	2003	Spring	6276	1571	3.07	9	0.03	56	0.09	3	0.00	--	--	--
Tribal Mothership	2003	Fall	13155	1833	5.90	--	--	135	0.27	3744	6.40	--	--	--
Tribal Mothership	2004	Spring	6458	661	2.09	11	0.05	--	--	--	--	--	--	--
Tribal Mothership	2004	Fall	17054	3032	6.21	--	--	207	0.57	--	--	--	--	9
Tribal Mothership	2005	Spring	9288	1811	3.65	2	0.01	180	0.30	26	0.03	--	--	2
Tribal Mothership	2005	Fall	14274	2093	5.02	--	--	164	0.31	357	0.54	--	--	6
Tribal Mothership	2006	Spring	2730	557	1.14	6	0.03	3	0.01	--	--	--	--	--
Tribal Mothership	2006	Fall	2675	103	0.21	18	0.04	--	--	--	--	--	--	--
Tribal Mothership	2007	Fall	5129	710	1.02	--	--	9	0.03	--	--	--	--	--
Tribal Mothership	2008	Fall	14977	157	0.47	--	--	--	--	--	--	--	--	--
Tribal Mothership	2009	Fall	13469	824	1.37	11	0.05	8	0.02	--	--	--	--	--
Tribal Mothership	2010	Spring	88	8	0.02	--	--	--	--	--	--	--	--	--
Tribal Mothership	2010	Fall	16118	642	1.87	1	0.00	5	0.01	--	--	--	--	--
Tribal Mothership	2011	Fall	6147	371	0.62	19	0.07	10	0.02	382	0.65	--	--	--

Table 25a. Summary of salmon bycatch count and weight by species and sector, 2002–06. Bycatch in the shoreside catch shares fisheries include both EM and 100% observed sub-sectors.

Species	Sector Group	Sector	2002:	2002:	2003:	2003:	2004:	2004:	2005:	2005:	2006:	2006:
			Individuals	Weight (mt)								
Chinook	Non-Catch Shares	Combined LE & OA CA Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Catch Shares	EFP	22	0.0594	51	0.0733	3	0.0215	--	--	--	--
Chinook	Non-Catch Shares	LE CA Halibut	381	0.3655	120	0.1238	492	0.7634	423	0.7930	107	0.1759
Chinook	Non-Catch Shares	Limited Entry Trawl	15384	25.8929	16855	29.8570	1773	3.7173	816	1.6270	61	0.0883
Chinook	Non-Catch Shares	Nearshore	--	--	22	0.1241	39	0.0748	31	0.0764	19	0.1465
Chinook	Non-Catch Shares	OA CA Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	--	--	--	--
Chinook	Hake Sectors	Catcher Processor	954	2.8768	570	1.7463	416	1.9362	1754	5.4609	112	0.6124
Chinook	Hake Sectors	Non-Tribal Mothership	709	2.3091	2047	5.5153	387	1.1892	2204	6.7789	1080	4.0604
Chinook	Hake Sectors	Midwater Hake	--	--	--	--	--	--	--	--	--	--
Chinook	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Chinook	Hake Sectors	Shoreside - EFP	1062	--	425	--	4206	--	4018	--	839	--
Chinook	Hake Sectors	Shoreside - Tribal	--	--	9	--	50	--	76	--	1271	--
Chinook	Hake Sectors	Tribal Mothership	1004	3.3206	3404	8.9696	3693	8.3022	3904	8.6681	660	1.3527
Chum	Non-Catch Shares	Limited Entry Trawl	14	0.0556	38	0.1217	4	0.0097	--	--	--	--
Chum	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	--	--	--	--
Chum	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	--	--	--	--	--	--
Chum	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Catcher Processor	14	0.0683	8	0.0295	27	0.0906	8	0.0272	8	0.0381
Chum	Hake Sectors	Non-Tribal Mothership	10	0.0591	3	0.0129	28	0.1018	12	0.0428	79	0.4251
Chum	Hake Sectors	Midwater Hake	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Tribal Mothership	51	0.2298	9	0.0295	11	0.0507	2	0.0092	24	0.0687
Coho	Non-Catch Shares	LE CA Halibut	--	--	--	--	--	--	--	--	48	0.1929
Coho	Non-Catch Shares	LE Sablefish - Hook and Line	--	--	3	0.0118	--	--	3	0.0111	--	--

Table 25a (continued). Summary of salmon bycatch count and weight by species and sector, 2002–06.

Species	Sector Group	Sector	2002:	2002:	2003:	2003:	2004:	2004:	2005:	2005:	2006:	2006:
			Individuals	Weight (mt)								
Coho	Non-Catch Shares	Limited Entry Trawl	26	0.0200	32	0.0706	67	0.2024	5	0.0065	--	--
Coho	Non-Catch Shares	Nearshore	--	--	--	--	45	0.1949	--	--	--	--
Coho	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Hook and Line	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Catcher Processor	69	0.1699	--	--	1	0.0019	4	0.0043	2	0.0085
Coho	Hake Sectors	Non-Tribal Mothership	77	0.2542	3	0.0072	--	--	82	0.1868	26	0.0757
Coho	Hake Sectors	Midwater Hake	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Tribal Mothership	23	0.0538	191	0.3574	207	0.5657	344	0.6104	3	0.0067
Pink	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Pink	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Pink	Hake Sectors	Catcher Processor	--	--	13	0.0258	--	--	48	0.0533	--	--
Pink	Hake Sectors	Non-Tribal Mothership	--	--	4	0.0031	--	--	--	--	--	--
Pink	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Pink	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Pink	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	--	--
Pink	Hake Sectors	Tribal Mothership	--	--	3747	6.4025	--	--	383	0.5772	--	--
Sockeye	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Catcher Processor	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Non-Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	LE CA Halibut	147	0.0718	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	LE Sablefish - Hook and Line	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	Limited Entry Trawl	15	0.0375	4	0.0102	38	0.1035	--	--	--	--

Table 25a (continued). Summary of salmon bycatch count and weight by species and sector, 2002–06.

Species	Sector Group	Sector	2002: Individuals	2002: Weight (mt)	2003: Individuals	2003: Weight (mt)	2004: Individuals	2004: Weight (mt)	2005: Individuals	2005: Weight (mt)	2006: Individuals	2006: Weight (mt)
Unspecified	Non-Catch Shares	Nearshore	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	OA CA Halibut	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Catcher Processor	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Non-Tribal Mothership	3	0.0181	186	0.4414	--	--	--	--	--	--
Unspecified	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	21	--
Unspecified	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	2	--
Unspecified	Hake Sectors	Tribal Mothership	1	0.0020	--	--	9	0.0079	8	0.0139	--	--

Table 25b. Summary of salmon bycatch count and weight by species and sector, 2007–11. Bycatch in the shoreside catch shares fisheries include both EM and 100% observed sub-sectors.

Species	Sector Group	Sector	2007: Individuals	2007: Weight (mt)	2008: Individuals	2008: Weight (mt)	2009: Individuals	2009: Weight (mt)	2010: Individuals	2010: Weight (mt)	2011: Individuals	2011: Weight (mt)
Chinook	Non-Catch Shares	Combined LE & OA CA Halibut	--	--	--	--	--	--	17	0.0136	--	--
Chinook	Non-Catch Shares	EFP	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Catch Shares	LE CA Halibut	61	0.1549	75	0.1688	--	--	--	--	--	--
Chinook	Non-Catch Shares	Limited Entry Trawl	191	0.3564	419	0.7002	308	0.4559	237	0.2315	--	--
Chinook	Non-Catch Shares	Nearshore	--	--	--	--	22	0.0869	16	0.1424	8	0.0470
Chinook	Non-Catch Shares	OA CA Halibut	--	--	--	--	--	--	--	--	45	0.0218
Chinook	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	175	0.3073
Chinook	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--

Table 25b (continued). Summary of salmon bycatch count and weight by species and sector, 2007–11.

Species	Sector Group	Sector	2007: Individuals	2007: Weight (mt)	2008: Individuals	2008: Weight (mt)	2009: Individuals	2009: Weight (mt)	2010: Individuals	2010: Weight (mt)	2011: Individuals	2011: Weight (mt)
Chinook	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	--	--	--	--
Chinook	Hake Sectors	Catcher Processor	733	2.4691	493	2.0144	22	0.1304	257	1.1999	2693	7.6643
Chinook	Hake Sectors	Non-Tribal Mothership	584	1.7260	225	0.9306	296	1.0982	457	1.6791	1296	4.2958
Chinook	Hake Sectors	Midwater Hake	--	--	--	--	--	--	--	--	--	--
Chinook	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	3722	12.0192
Chinook	Hake Sectors	Shoreside - EFP	2462	--	1962	--	279	--	2997	--	--	--
Chinook	Hake Sectors	Shoreside - Tribal	1690	--	539	--	1321	--	28	--	457	1874.0000
Chinook	Hake Sectors	Tribal Mothership	710	1.0192	157	0.4694	824	1.3747	650	1.8843	371	0.6209
Chum	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Chum	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	--	--	--	--
Chum	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	--	--	--	--	--	--
Chum	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Catcher Processor	73	0.2588	43	0.1300	--	--	4	0.0095	34	0.0860
Chum	Hake Sectors	Non-Tribal Mothership	96	0.3426	17	0.0688	41	0.1590	6	0.0160	12	0.0460
Chum	Hake Sectors	Midwater Hake	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	42	0.1624
Chum	Hake Sectors	Shoreside - EFP	113	--	8	--	2	--	8	--	--	--
Chum	Hake Sectors	Shoreside - Tribal	8	--	11	--	--	--	--	--	4	34.0000
Chum	Hake Sectors	Tribal Mothership	--	--	--	--	11	0.0539	1	0.0034	19	0.0665
Coho	Non-Catch Shares	LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Coho	Non-Catch Shares	LE Sablefish - Hook and Line	4	0.0095	--	--	--	--	--	--	--	--
Coho	Non-Catch Shares	Limited Entry Trawl	13	0.0156	--	--	--	--	31	0.0713	--	--
Coho	Non-Catch Shares	Nearshore	11	0.0114	41	0.1721	69	0.1907	41	0.2089	63	0.2131
Coho	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	19	0.0320
Coho	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Hook and Line	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Catcher Processor	88	0.1606	3	0.0050	--	--	--	--	--	--

Table 25b (continued). Summary of salmon bycatch count and weight by species and sector, 2007–11.

Species	Sector Group	Sector	2007:	2007:	2008:	2008:	2009:	2009:	2010:	2010:	2011:	2011:
			Individuals	Weight (mt)								
Coho	Hake Sectors	Non-Tribal Mothership	138	0.3472	18	0.0421	12	0.0164	--	--	5	0.0073
Coho	Hake Sectors	Midwater Hake	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	136	0.4129
Coho	Hake Sectors	Shoreside - EFP	141	--	10	--	37	--	16	--	--	--
Coho	Hake Sectors	Shoreside - Tribal	98	--	21	--	49	--	--	--	18	85.0000
Coho	Hake Sectors	Tribal Mothership	9	0.0323	--	--	8	0.0192	5	0.0103	10	0.0221
Pink	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	2	0.0023	--	--	--	--
Pink	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Pink	Hake Sectors	Catcher Processor	19	0.0188	--	--	--	--	--	--	10	0.0159
Pink	Hake Sectors	Non-Tribal Mothership	15	0.0195	--	--	2	0.0023	--	--	2	0.0027
Pink	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	6113	11.4876
Pink	Hake Sectors	Shoreside - EFP	47	--	7	--	26	--	--	--	--	--
Pink	Hake Sectors	Shoreside - Tribal	513	--	9	--	129	--	--	--	705	2926.0000
Pink	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	382	0.6465
Sockeye	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	1	0.0007
Sockeye	Hake Sectors	Catcher Processor	--	--	2	0.0038	--	--	2	0.0033	--	--
Sockeye	Hake Sectors	Non-Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	2	0.0032
Sockeye	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	2	11.0000
Unspecified	Non-Catch Shares	LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	LE Sablefish - Hook and Line	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	Nearshore	--	--	--	--	--	--	26	0.1621	--	--
Unspecified	Non-Catch Shares	OA CA Halibut	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Catcher Processor	--	--	18	0.0887	--	--	--	--	6	0.0143
Unspecified	Hake Sectors	Non-Tribal Mothership	--	--	--	--	--	--	2	0.0041	--	--
Unspecified	Hake Sectors	Shoreside Hake	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	2	--	--	--
Unspecified	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	--	--

Table 25c. Summary of salmon bycatch count and weight by species and sector, 2012–16. Bycatch in the shoreside catch shares fisheries include both EM and 100% observed sub-sectors.

Species	Sector Group	Sector	2012:	2012:	2013:	2013:	2014:	2014:	2015:	2015:	2016:	2016:
			Individuals	Weight (mt)								
Chinook	Non-Catch Shares	Combined LE & OA CA Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Catch Shares	EFP	--	--	--	--	1	0.0100	--	--	--	--
Chinook	Non-Catch Shares	LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Catch Shares	Nearshore	63	0.3140	122	0.6994	34	0.3001	40	0.1597	15	0.0703
Chinook	Non-Catch Shares	OA CA Halibut	--	--	96	0.0419	4	0.0008	132	0.2949	187	0.5325
Chinook	Non-Catch Shares	Pink Shrimp	2	0.0013	--	--	--	--	--	--	47	0.0025
Chinook	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Chinook	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	304	0.5000	323	0.5867	984	1.6442	1020	2.0216	374	0.8394
Chinook	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	12	0.0320	71	0.2604	661	1.3000	--	--	--	--
Chinook	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	482	1.9411	47	0.1992
Chinook	Hake Sectors	Catcher Processor	1928	6.1682	1758	5.1068	3785	10.0316	1545	4.2315	2684	9.2902
Chinook	Hake Sectors	Non-Tribal Mothership	2281	6.8400	1981	5.8499	2910	6.4753	261	0.7968	367	1.6322
Chinook	Hake Sectors	Midwater Hake	--	--	--	--	--	--	2002	8.3897	738	4.0502
Chinook	Hake Sectors	Shoreside Hake	2359	7.4017	1263	4.5553	6898	17.9748	--	--	--	--
Chinook	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Chinook	Hake Sectors	Shoreside - Tribal	17	97.0000	1014	3856.0000	45	311.0000	3	26.0000	10	43.0000
Chinook	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Chum	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Chum	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	53	0.0016	--	--
Chum	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	1	0.0057	--	--	--	--	--	--
Chum	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	5	0.0172	--	--
Chum	Hake Sectors	Catcher Processor	51	0.2389	26	0.1206	--	--	5	0.0154	30	0.1314
Chum	Hake Sectors	Non-Tribal Mothership	2	0.0087	--	--	4	0.0190	--	--	11	0.0595
Chum	Hake Sectors	Midwater Hake	--	--	--	--	--	--	7	0.0295	21	0.0858
Chum	Hake Sectors	Shoreside Hake	3	0.0129	7	0.0309	4	0.0284	--	--	--	--
Chum	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Chum	Hake Sectors	Shoreside - Tribal	--	--	5	1.0000	--	--	--	--	--	--
Chum	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Coho	Non-Catch Shares	LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Coho	Non-Catch Shares	LE Sablefish - Hook and Line	--	--	--	--	22	0.0754	3	0.0085	--	--

Table 25c (continued). Summary of salmon bycatch count and weight by species and sector, 2012–16.

Species	Sector Group	Sector	2012:	2012:	2013:	2013:	2014:	2014:	2015:	2015:	2016:	2016:
			Individuals	Weight (mt)								
Coho	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Coho	Non-Catch Shares	Nearshore	16	0.0604	18	0.0583	66	0.1777	28	0.0437	9	0.0039
Coho	Non-Catch Shares	Pink Shrimp	--	--	--	--	--	--	27	0.0021	--	--
Coho	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	27	0.0457	49	0.0622	18	0.0409	1	0.0013	9	0.0125
Coho	Non-Hake Catch Shares	CS - Hook and Line	--	--	--	--	15	0.0642	--	--	--	--
Coho	Non-Hake Catch Shares	CS - Non-Hake Midwater Trawl	--	--	--	--	12	0.0354	--	--	--	--
Coho	Non-Hake Catch Shares	Midwater Rockfish	--	--	--	--	--	--	7	0.0227	--	--
Coho	Hake Sectors	Catcher Processor	13	0.0202	--	--	8	0.0173	4	0.0077	2	0.0054
Coho	Hake Sectors	Non-Tribal Mothership	4	0.0062	6	0.0203	96	0.1755	--	--	--	--
Coho	Hake Sectors	Midwater Hake	--	--	--	--	--	--	9	0.0200	5	0.0145
Coho	Hake Sectors	Shoreside Hake	16	0.0399	33	0.1383	167	0.4128	--	--	--	--
Coho	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Coho	Hake Sectors	Shoreside - Tribal	--	--	78	439.0000	--	--	--	--	--	--
Coho	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Pink	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--
Pink	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	2	0.0018	--	--	2	0.0027	--	--	--	--
Pink	Hake Sectors	Catcher Processor	22	0.0304	34	0.0450	--	--	23	0.0206	--	--
Pink	Hake Sectors	Non-Tribal Mothership	--	--	3	0.0038	--	--	--	--	--	--
Pink	Hake Sectors	Shoreside Hake	--	--	2	0.0045	--	--	--	--	--	--
Pink	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Pink	Hake Sectors	Shoreside - Tribal	--	--	5	18.0000	--	--	--	--	--	--
Pink	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Sockeye	Non-Hake Catch Shares	CS - Bottom and Midwater Trawl and LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Catcher Processor	--	--	--	--	--	--	--	--	--	--
Sockeye	Hake Sectors	Non-Tribal Mothership	--	--	--	--	--	--	--	--	6	0.0116
Sockeye	Hake Sectors	Shoreside Hake	--	--	--	--	1	0.0014	--	--	--	--
Sockeye	Hake Sectors	Shoreside - Tribal	--	--	1	3.0000	--	--	--	--	--	--
Unspecified	Non-Catch Shares	LE CA Halibut	--	--	--	--	--	--	--	--	--	--
Unspecified	Non-Catch Shares	LE Sablefish - Hook and Line	--	--	--	--	4	0.0199	--	--	--	--
Unspecified	Non-Catch Shares	Limited Entry Trawl	--	--	--	--	--	--	--	--	--	--

Table 25c (continued). Summary of salmon bycatch count and weight by species and sector, 2012–16.

Species	Sector Group	Sector	2012: Individuals	2012: Weight (mt)	2013: Individuals	2013: Weight (mt)	2014: Individuals	2014: Weight (mt)	2015: Individuals	2015: Weight (mt)	2016: Individuals	2016: Weight (mt)
Unspecified	Non-Catch Shares	Nearshore	--	--	--	--	9	0.0623	18	0.0903	--	--
Unspecified	Non-Catch Shares	OA CA Halibut	--	--	--	--	--	--	9	0.0136	--	--
Unspecified	Non-Hake Catch Shares	CS - Bottom Trawl and LE California Halibut	2	0.0024	--	--	1	0.0014	4	0.0055	--	--
Unspecified	Hake Sectors	Catcher Processor	--	--	1	0.0002	2	0.0005	--	--	--	--
Unspecified	Hake Sectors	Non-Tribal Mothership	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Shoreside Hake	2	0.0091	--	--	33	0.0898	--	--	--	--
Unspecified	Hake Sectors	Shoreside - EFP	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Shoreside - Tribal	--	--	--	--	--	--	--	--	--	--
Unspecified	Hake Sectors	Tribal Mothership	--	--	--	--	--	--	--	--	--	--

Table 26. Summary of biological data for at-sea salmon catch, separated by sector, collected by WCGOP observers from 2002–16. All data was not available for every specimen. Due to 100% coverage in Catch Shares sectors, more biological data are typically collected.

Species	Sector	Year	Individuals Biologically Sampled			Unsex Individuals	Minimum Length (cm)	Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present		Individuals with Adipose Fin Clipped		Genetic Samples Taken
			Female Individuals	Male Individuals									Adipose Fin Present	Adipose Fin Clipped			
Chinook	Limited Entry Trawl	2002	1	1	0	0	57	57	57	2.27	2.27	2.27	0	0	0	0	0
Chinook	Limited Entry Trawl	2003	8	4	4	0	41	48	54	0.86	1.52	2.26	0	0	0	0	0
Chinook	Limited Entry Trawl	2004	253	127	113	2	18	54	83	0.69	2.38	7.85	0	0	0	0	0
Chinook	Limited Entry Trawl	2005	119	54	45	7	25	51	70	0.49	2.25	5.53	0	0	0	0	0
Chinook	Limited Entry Trawl	2006	8	3	5	0	41	54	80	1.04	1.93	4.59	0	1	0	0	0
Chinook	Limited Entry Trawl	2007	29	14	15	0	38	52	67	0.75	2.08	4.33	24	5	0	0	0
Chinook	Limited Entry Trawl	2008	54	26	27	0	36	53	69	0.59	2.10	4.82	49	4	0	37	0
Chinook	Limited Entry Trawl	2009	74	32	39	1	28	45	77	0.32	1.82	6.63	35	22	0	50	0
Chinook	Limited Entry Trawl	2010	4	0	2	0	47	57	64	1.61	2.54	3.21	2	1	0	4	0
Chinook	CS - Bottom Trawl	2011	164	80	79	1	40	51	83	0.77	1.86	9.34	117	45	0	124	0
Chinook	CS - Bottom Trawl	2012	293	160	129	0	36	49	77	0.67	1.77	7.16	258	34	0	84	0
Chinook	CS - Bottom Trawl	2013	160	59	73	0	32	51	84	0.52	1.97	9.90	105	51	0	128	0
Chinook	CS - Bottom Trawl	2014	550	288	224	6	31	52	85	0.47	2.35	10.27	339	209	0	388	0
Chinook	CS - Bottom Trawl	2015	601	316	265	16	36	54	89	0.64	2.25	10.03	491	109	0	570	0
Chinook	CS - Bottom Trawl	2016	172	102	69	0	34	54	84	0.49	2.27	9.48	139	32	0	155	0
Chinook	Midwater Rockfish	2012	4	3	1	0	45	55	60	1.23	2.41	2.99	3	1	0	1	0
Chinook	Midwater Rockfish	2013	10	4	2	0	31	58	79	0.44	3.59	7.56	3	7	0	6	0
Chinook	Midwater Rockfish	2015	30	19	11	0	39	67	93	0.77	5.06	12.10	12	16	0	30	0
Chinook	Midwater Hake	2011	11	6	3	2	42	65	78	1.11	4.80	8.74	9	2	0	11	0
Chinook	Midwater Hake	2012	8	2	6	0	49	61	77	1.63	3.07	5.63	6	2	0	6	0
Chinook	Midwater Hake	2013	23	8	3	0	42	61	74	1.06	3.62	6.45	16	7	0	11	0
Chinook	Midwater Hake	2014	19	11	8	0	41	50	70	1.68	2.81	4.94	16	3	0	5	0
Chinook	Midwater Hake	2015	1	1	0	0	79	79	79	7.83	7.83	7.83	1	0	0	1	0
Chinook	LE CA Halibut	2004	79	37	42	0	27	48	84	0.40	1.93	9.68	0	0	0	0	0
Chinook	LE CA Halibut	2005	41	18	23	0	26	48	71	0.30	2.04	5.24	0	0	0	0	0
Chinook	LE CA Halibut	2006	14	1	7	0	32	48	67	0.54	2.00	4.45	1	0	0	0	0
Chinook	LE CA Halibut	2007	12	0	11	0	33	48	68	0.69	1.99	4.99	9	3	0	0	0
Chinook	LE CA Halibut	2008	21	14	7	0	36	54	69	0.54	2.42	5.70	10	9	0	5	0
Chinook	LE CA Halibut	2010	2	0	2	0	27	37	46	0.35	0.35	0.35	2	0	0	1	0

Table 26 (continued). Summary of biological data for at-sea salmon catch, separated by sector, collected by WCGOP observers from 2002–16.

Species	Sector	Year	Individuals Biologically Sampled				Minimum Length (cm)	Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present		Individuals with Adipose Fin Clipped		Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals												
Chinook	LE CA Halibut	2011	2	2	0	0	53	60	66	2.99	3.95	4.91	1	1	1	1	
Chinook	LE CA Halibut	2013	1	1	0	0	63	63	63	2.67	2.67	2.67	1	0	0	1	
Chinook	OA CA Halibut	2011	6	2	3	0	31	35	38	0.25	0.49	0.81	5	1	1	1	
Chinook	OA CA Halibut	2013	6	1	4	1	28	31	34	0.30	0.48	0.68	3	3	3	2	
Chinook	OA CA Halibut	2014	1	0	0	0	23	23	23	0.20	0.20	0.20	1	0	0	0	
Chinook	OA CA Halibut	2015	42	15	27	0	33	51	78	0.57	2.45	7.16	26	16	37		
Chinook	OA CA Halibut	2016	57	8	49	0	32	55	73	1.26	3.10	6.32	34	23	57		
Chinook	Nearshore	2004	2	0	0	0	55	57	59	1.98	2.04	2.10	0	0	0	0	
Chinook	Nearshore	2006	1	0	0	0	46	46	46	1.23	1.23	1.23	0	0	0	0	
Chinook	Nearshore	2011	1	0	0	0	74	74	74	6.67	6.67	6.67	0	0	0	0	
Chinook	Nearshore	2012	3	0	0	0	57	69	79	2.47	5.52	8.15	0	0	0	0	
Chinook	Nearshore	2013	1	0	0	0	33	33	33	0.49	0.49	0.49	0	0	0	0	
Chinook	Nearshore	2015	1	0	1	0	66	66	66	3.33	3.33	3.33	1	0	0	0	
Chinook	Pink Shrimp	2012	2	1	1	0	30	35	40	0.40	0.61	0.81	2	0	0	2	
Chinook	Pink Shrimp	2016	4	0	0	4	13	15	17	0.05	0.06	0.07	4	0	0	4	
Chum	Limited Entry Trawl	2003	1	0	0	0	61	61	61	2.83	2.83	2.83	0	0	0	0	
Chum	Limited Entry Trawl	2004	1	0	1	0	57	57	57	2.57	2.57	2.57	0	0	0	0	
Chum	Midwater Rockfish	2013	1	1	0	0	69	69	69	4.40	4.40	4.40	1	0	0	1	
Coho	Limited Entry Trawl	2004	5	2	3	0	51	61	72	1.48	3.24	5.80	0	0	0	0	
Coho	Limited Entry Trawl	2005	1	1	0	0	45	45	45	1.31	1.31	1.31	0	0	0	0	
Coho	Limited Entry Trawl	2007	2	0	1	0	47	48	48	1.23	1.31	1.38	1	1	0	0	
Coho	Limited Entry Trawl	2010	2	0	1	0	43	51	58	0.89	1.86	2.84	2	0	0	1	
Coho	CS - Bottom Trawl	2011	18	8	10	0	49	59	65	1.01	1.80	4.20	16	1	12		
Coho	CS - Bottom Trawl	2012	26	17	8	0	41	51	71	1.04	1.85	4.30	18	7	17		
Coho	CS - Bottom Trawl	2013	18	10	7	0	37	52	65	1.06	2.27	3.90	12	5	12		
Coho	CS - Bottom Trawl	2014	15	7	8	0	44	55	82	0.99	2.72	7.48	13	2	15		
Coho	CS - Bottom Trawl	2016	9	4	5	0	31	48	67	0.42	1.50	3.04	5	4	9		
Coho	LE CA Halibut	2006	4	2	2	0	65	67	69	3.90	4.33	5.04	3	1	0	0	
Coho	LE Sablefish - Hook and Line	2005	1	1	0	0	66	66	66	4.17	4.17	4.17	0	0	0	0	

Table 26 (continued). Summary of biological data for at-sea salmon catch, separated by sector, collected by WCGOP observers from 2002–16.

Species	Sector	Year	Individuals Biologically Sampled				Minimum Length (cm)	Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present		Individuals with Adipose Fin Clipped		Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals												
Coho	LE Sablefish - Hook and Line	2007	1	1	0	0	63	63	63	2.77	2.77	2.77	0	1	1	0	
Coho	LE Sablefish - Hook and Line	2014	4	1	3	0	65	68	71	3.53	4.13	4.84	2	2	2	4	
Coho	LE Sablefish - Hook and Line	2015	1	0	0	0	59	59	59	3.14	3.14	3.14	1	0	0	0	
Coho	Nearshore	2004	2	0	0	0	53	58	63	3.46	4.20	4.94	0	0	0	0	
Coho	Nearshore	2007	1	0	0	0	38	38	38	1.11	1.11	1.11	1	0	0	0	
Coho	Nearshore	2009	1	0	0	0	32	32	32	0.49	0.49	0.49	0	0	0	0	
Coho	Nearshore	2012	1	0	0	0	71	71	71	4.94	4.94	4.94	0	0	0	0	
Coho	Nearshore	2014	1	0	0	0	32	32	32	1.04	1.04	1.04	0	0	0	0	
Coho	Nearshore	2015	2	0	0	0	31	50	68	0.64	2.54	4.45	1	0	0	0	
Coho	Nearshore	2016	1	0	0	0	33	33	33	0.49	0.49	0.49	0	0	0	0	
Pink	Limited Entry Trawl	2009	1	0	0	0	41	41	41	1.02	1.02	1.02	1	0	0	1	
Pink	CS - Bottom Trawl	2012	2	1	1	0	42	42	42	0.91	0.95	0.99	0	0	0	0	
Pink	CS - Bottom Trawl	2014	2	1	1	0	48	48	48	1.33	1.41	1.48	2	0	0	2	
Pink	Midwater Hake	2011	3	0	0	0	49	53	57	1.73	1.73	1.73	0	0	0	0	
Sockeye	CS - Bottom Trawl	2011	1	0	0	0	37	37	37	0.69	0.69	0.69	1	0	0	1	
Unspecified	Limited Entry Trawl	2004	3	2	1	0	41	52	71	0.99	2.20	4.50	0	0	0	0	
Unspecified	CS - Bottom Trawl	2012	2	0	0	0	47	49	50	--	--	--	2	0	0	2	
Unspecified	CS - Bottom Trawl	2015	3	2	1	0	44	46	49	1.14	1.28	1.48	1	2	2	2	

Table 27. Summary of biological data for salmon discarded shoreside, collected by the Catch Monitor (CM) program 2010–16. All data were not available for every specimen, but 100% coverage of the catch typically leads to greater collection of biological data than in other fishery sectors.

Species	Sector	Year	Individuals Biologically Sampled		Female Individuals	Male Individuals	Minimum Length (cm)	Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Status			Genetic Samples Taken
			Individuals with Adipose Fin Present	Individuals with Adipose Fin Clipped									Individuals with Adipose Fin Unspecified			
Chinook	CS - Bottom Trawl	2015	6	2	2	43	45	47	0.99	1.14	1.48	1	3	2	4	
Chinook	CS EM - Bottom Trawl	2015	2	1	1	68	69	69	4.45	4.64	4.84	2	0	0	2	
Chinook	CS EM - Bottom Trawl	2016	66	27	23	43	55	86	0.67	2.10	4.69	54	12	0	64	
Chinook	Midwater Hake	2010	2137	1003	1062	11	61	109	0.25	4.03	22.23	1258	870	9	1923	
Chinook	Midwater Hake	2011	2819	1333	1445	12	60	106	0.12	3.78	23.21	1615	1177	27	2411	
Chinook	Midwater Hake	2012	1761	922	825	34	62	106	0.77	3.77	16.30	1480	274	7	1337	
Chinook	Midwater Hake	2013	1081	445	515	36	64	102	0.49	4.12	16.84	904	158	19	851	
Chinook	Midwater Hake	2014	3482	1677	1740	33	59	109	0.49	3.49	17.78	2858	624	0	2440	
Chinook	Midwater Hake	2015	179	100	78	34	65	96	0.40	4.53	14.82	137	42	0	171	
Chinook	Midwater Hake	2016	99	62	36	44	72	96	1.23	6.15	14.32	90	9	0	94	
Chinook	Midwater Hake EM	2015	1579	781	739	38	66	107	0.74	4.82	17.78	1277	301	1	1083	
Chinook	Midwater Hake EM	2016	625	340	280	30	70	103	0.89	5.94	19.76	548	77	0	568	
Chinook	Midwater Rockfish	2010	3	2	1	51	62	68	1.58	3.49	4.45	3	0	0	3	
Chinook	Midwater Rockfish	2011	13	9	4	46	56	78	1.36	2.62	6.91	8	5	0	13	
Chinook	Midwater Rockfish	2012	26	4	4	41	59	78	0.99	3.24	7.90	7	2	17	9	
Chinook	Midwater Rockfish	2014	25	11	14	40	53	65	1.11	2.45	4.69	6	19	0	25	
Chinook	Midwater Rockfish	2015	107	50	53	25	64	92	0.25	4.43	11.36	61	46	0	99	
Chinook	Midwater Rockfish	2016	7	3	4	25	47	75	0.20	2.79	8.10	6	1	0	7	
Chinook	Midwater Rockfish EM	2015	256	125	123	25	63	89	0.20	4.46	13.83	172	81	3	157	
Chinook	Midwater Rockfish EM	2016	40	22	18	41	67	96	0.94	5.22	16.05	26	14	0	38	
Chum	Midwater Hake	2010	6	3	1	37	58	73	0.99	3.00	5.80	6	0	0	1	
Chum	Midwater Hake	2011	2	1	1	62	65	68	2.72	3.33	3.95	2	0	0	0	
Chum	Midwater Hake	2015	1	--	1	81	81	81	7.16	7.16	7.16	1	0	0	0	
Chum	Midwater Hake	2016	1	1	--	66	66	66	3.95	3.95	3.95	1	0	0	0	
Chum	Midwater Hake - EM	2015	6	3	3	62	69	77	2.96	4.24	5.93	6	0	0	0	
Chum	Midwater Hake - EM	2016	20	12	7	61	70	78	2.96	4.44	6.42	20	0	0	0	
Chum	Midwater Rockfish - EM	2015	5	4	--	62	65	70	3.33	3.63	4.45	5	0	0	0	
Coho	Midwater Hake	2010	10	1	5	57	66	74	3.21	4.42	5.68	4	6	0	2	

Table 27 (continued). Summary of biological data for salmon discarded shoreside, collected by the Catch Monitor (CM) program 2010–16.

Species	Sector	Year	Individuals Biologically Sampled		Female Individuals	Male Individuals	Minimum Length (cm)	Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present		Individuals with Adipose Fin Clipped		Individuals with Adipose Fin Status Unspecified	Genetic Samples Taken
			Female	Male									Adipose Fin Present	Adipose Fin Clipped	Adipose Fin Present	Adipose Fin Clipped		
Coho	Midwater Hake	2011	133	73	54	35	61	91	0.64	3.24	10.62	80	52	1	3			
Coho	Midwater Hake	2012	15	6	7	49	60	74	1.53	3.05	5.93	11	4	0	0			
Coho	Midwater Hake	2013	33	20	13	55	67	86	1.98	4.54	11.21	27	6	0	0			
Coho	Midwater Hake	2014	162	73	88	39	58	80	0.93	2.82	6.42	104	58	0	0			
Coho	Midwater Hake	2015	1	--	1	55	55	55	2.59	2.59	2.59	0	1	0	0			
Coho	Midwater Hake	2016	1	1	--	73	73	73	4.94	4.94	4.94	0	1	0	0			
Coho	Midwater Hake - EM	2015	8	6	2	46	57	72	1.23	2.56	5.43	7	1	0	0			
Coho	Midwater Hake - EM	2016	3	1	1	52	60	67	1.93	3.15	4.20	2	1	0	0			
Coho	Midwater Rockfish	2014	4	--	4	50	55	58	1.58	2.21	2.57	1	3	0	0			
Coho	Midwater Rockfish	2015	3	2	1	52	61	66	1.73	2.96	3.70	0	3	0	0			
Coho	Midwater Rockfish - EM	2015	5	2	3	59	69	82	2.22	4.49	6.91	5	0	0	0			
Unidentified Midwater Hake		2011	30	11	19	50	60	89	1.73	3.61	11.36	29	0	1	28			

Table 28. Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016. All data were not available for every specimen. 100% coverage of the catch typically leads to greater collection of biological data than in other fishery sectors.

Species	Sector	Year	Individuals Biologically Sampled			Unsex Individuals	Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose			Genetic Samples Taken
			Female Individuals	Male Individuals	Fin Present							Individuals with Adipose Fin Clipped	Individuals with Adipose Fin Unspecified	Genetic Samples Taken	
Chinook	Historic	1980	2379	1277	965	30	55	109	--	--	--	--	--	--	--
Chinook	Historic	1981	2155	1098	981	28	54	106	--	--	--	--	--	--	--
Chinook	Historic	1982	5328	2827	2200	15	58	112	--	--	--	--	--	--	--
Chinook	Historic	1983	1861	894	870	26	54	109	--	--	--	--	--	--	--
Chinook	Historic	1984	2162	999	1154	30	50	100	--	--	--	--	--	--	--
Chinook	Historic	1985	1183	563	572	22	60	105	--	--	--	--	--	--	--
Chinook	Historic	1986	21892	10545	11124	20	49	116	--	--	--	--	--	--	--
Chinook	Historic	1987	8273	4430	3737	20	57	114	--	--	--	--	--	--	--
Chinook	Historic	1988	7676	3799	3765	22	54	105	--	--	--	--	--	--	--
Chinook	Historic	1989	5179	2687	2451	25	56	111	--	--	--	--	--	--	--
Chinook	Historic	1990	3146	1526	1547	24	54	105	--	--	--	--	--	--	--
Chinook	At-Sea CP	1991	770	468	301	19	59	98	0.45	3.40	15.75	--	--	--	--
Chinook	At-Sea CP	1992	302	146	128	43	68	101	1.00	5.09	15.50	--	--	--	--
Chinook	At-Sea CP	1993	569	301	258	32	55	105	0.65	3.10	13.00	--	--	--	--
Chinook	At-Sea CP	1994	256	132	123	36	61	97	0.55	3.50	12.78	--	--	--	--
Chinook	At-Sea CP	1995	561	284	277	35	62	102	0.70	3.93	10.20	--	--	--	--
Chinook	At-Sea CP	1996	113	60	53	36	78	110	1.80	7.71	15.00	--	--	--	--
Chinook	At-Sea CP	1997	107	52	51	33	65	103	0.90	5.35	16.60	--	--	--	--
Chinook	At-Sea CP	1998	81	44	37	32	73	123	0.90	6.50	14.20	--	--	--	--
Chinook	At-Sea CP	1999	691	407	280	32	61	101	0.62	5.47	13.51	--	--	--	--
Chinook	At-Sea CP	2000	599	304	295	17	53	106	0.24	4.06	15.69	--	--	--	--
Chinook	At-Sea CP	2001	371	192	179	36	59	102	0.65	4.53	15.46	--	--	--	--
Chinook	At-Sea CP	2002	293	174	119	30	60	122	0.59	3.71	15.70	--	--	--	--
Chinook	At-Sea CP	2003	243	128	115	35	60	101	1.63	4.46	13.43	--	--	--	--
Chinook	At-Sea CP	2004	168	97	71	40	64	119	1.00	4.79	15.69	--	--	--	--
Chinook	At-Sea CP	2005	771	381	359	39	61	99	--	--	--	--	--	--	--
Chinook	At-Sea CP	2006	54	26	23	50	70	98	1.64	4.11	8.92	3	6	0	--
Chinook	At-Sea CP	2007	393	191	185	34	59	99	0.52	2.31	6.83	13	82	2	--
Chinook	At-Sea CP	2008	232	137	95	36	65	99	1.63	4.41	10.13	3	12	0	145

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled			Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present		Individuals with Adipose Fin Clipped		Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals						Fin Present	Fin Clipped	Unspecified		
Chinook	At-Sea CP	2009	12	8	4	59	78	104	2.23	6.35	10	2	1	11	
Chinook	At-Sea CP	2010	114	66	48	28	68	106	0.26	5.01	86	29	0	113	
Chinook	At-Sea CP	2011	1239	676	562	32	58	97	0.44	2.88	13.69	918	242	1	1103
Chinook	At-Sea CP	2012	984	543	440	33	60	114	0.47	3.20	14.43	791	150	1	922
Chinook	At-Sea CP	2013	787	421	365	34	59	90	0.56	2.96	10.44	726	51	9	784
Chinook	At-Sea CP	2014	1471	775	692	24	57	99	0.40	2.64	12.95	1060	153	0	1220
Chinook	At-Sea CP	2015	632	355	277	34	58	97	0.48	2.86	13.34	568	64	0	632
Chinook	At-Sea CP	2016	1258	754	503	37	61	96	0.59	3.44	13.23	1139	115	0	1251
Chinook	At-Sea MS	1991	731	387	311	33	58	91	0.50	3.87	10.90	--	--	--	--
Chinook	At-Sea MS	1992	139	53	70	35	63	93	0.50	3.75	9.80	--	--	--	--
Chinook	At-Sea MS	1993	556	280	276	31	48	86	0.80	2.61	10.40	--	--	--	--
Chinook	At-Sea MS	1994	724	353	364	29	51	102	0.40	2.93	14.90	--	--	--	--
Chinook	At-Sea MS	1995	1144	574	568	24	56	95	0.60	3.83	12.00	--	--	--	--
Chinook	At-Sea MS	1996	269	109	121	32	61	105	0.60	6.80	14.20	--	--	--	--
Chinook	At-Sea MS	1997	88	43	43	36	65	98	0.80	5.55	15.00	--	--	--	--
Chinook	At-Sea MS	1998	97	54	43	38	71	98	0.80	4.99	11.30	--	--	--	--
Chinook	At-Sea MS	1999	115	68	46	32	64	104	0.76	4.52	12.40	--	--	--	--
Chinook	At-Sea MS	2000	821	407	414	16	53	104	0.43	3.44	15.95	--	--	--	--
Chinook	At-Sea MS	2001	302	137	165	34	54	95	0.47	2.47	10.99	--	--	--	--
Chinook	At-Sea MS	2002	335	201	134	40	60	98	1.67	4.35	12.18	--	--	--	--
Chinook	At-Sea MS	2003	687	359	328	37	58	98	0.70	3.04	6.10	--	--	--	--
Chinook	At-Sea MS	2004	155	85	70	39	59	94	1.12	3.25	8.78	--	--	--	--
Chinook	At-Sea MS	2005	994	540	444	37	60	102	2.46	4.87	9.56	--	--	--	--
Chinook	At-Sea MS	2006	388	164	208	17	62	106	0.05	2.70	10.23	9	73	3	--
Chinook	At-Sea MS	2007	260	109	150	35	56	99	0.07	2.21	12.78	7	59	21	--
Chinook	At-Sea MS	2008	96	44	51	40	65	98	1.91	4.19	9.01	5	6	0	81
Chinook	At-Sea MS	2009	145	65	80	33	60	97	0.44	3.69	12.73	77	63	7	143
Chinook	At-Sea MS	2010	217	112	105	30	63	113	0.38	3.85	15.85	186	30	1	212
Chinook	At-Sea MS	2011	552	304	247	32	61	98	0.59	3.55	12.65	436	95	1	531
Chinook	At-Sea MS	2012	1106	664	441	32	60	95	0.58	3.00	12.70	942	117	0	1093

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled				Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose		Genetic Samples Taken	
			Female Individuals	Male Individuals	Unsex Individuals	Fin Present						Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified		
Chinook	At-Sea MS	2013	764	414	349	36	60	98	0.50	3.16	14.17	664	74	0	758
Chinook	At-Sea MS	2014	1323	681	642	32	54	93	0.42	2.31	12.57	978	157	7	1178
Chinook	At-Sea MS	2015	119	69	49	36	59	86	0.52	3.22	9.97	82	37	0	119
Chinook	At-Sea MS	2016	185	95	90	41	64	103	0.89	4.36	18.30	163	21	1	185
Chinook	Tribal MS	1996	79	35	44	25	53	84	--	--	--	--	--	--	--
Chinook	Tribal MS	1997	846	433	411	25	56	98	0.60	3.04	9.60	--	--	--	--
Chinook	Tribal MS	1998	828	426	401	28	52	106	0.50	3.22	16.20	--	--	--	--
Chinook	Tribal MS	1999	1264	727	537	27	54	116	1.00	3.47	6.40	--	--	--	--
Chinook	Tribal MS	2000	279	125	154	36	52	96	0.68	2.56	14.61	--	--	--	--
Chinook	Tribal MS	2001	376	197	179	27	59	91	0.37	2.70	11.69	--	--	--	--
Chinook	Tribal MS	2002	314	178	136	35	59	99	--	--	--	--	--	--	--
Chinook	Tribal MS	2003	1112	574	538	27	54	113	1.32	4.17	8.46	--	--	--	--
Chinook	Tribal MS	2004	932	481	451	32	53	108	1.66	4.98	13.42	--	--	--	--
Chinook	Tribal MS	2005	1074	497	577	17	54	102	--	--	--	--	--	--	--
Chinook	Tribal MS	2006	225	105	120	36	53	89	0.65	1.95	8.66	6	58	0	--
Chinook	Tribal MS	2007	206	109	97	30	48	77	0.33	1.30	3.50	2	87	0	--
Chinook	Tribal MS	2008	54	30	24	29	58	80	1.53	2.41	3.50	4	1	0	45
Chinook	Tribal MS	2009	256	129	127	24	51	81	0.15	1.71	7.43	141	115	0	249
Chinook	Tribal MS	2010	354	199	155	37	59	93	0.64	2.91	13.88	234	118	3	351
Chinook	Tribal MS	2011	206	95	111	22	48	94	0.12	1.68	13.26	90	114	1	203
Chum	Historic	1980	1	--	1	66	66	66	--	--	--	--	--	--	--
Chum	Historic	1981	8	3	5	47	66	77	--	--	--	--	--	--	--
Chum	Historic	1982	46	25	21	45	70	79	--	--	--	--	--	--	--
Chum	Historic	1983	17	10	6	33	55	81	--	--	--	--	--	--	--
Chum	Historic	1984	195	86	109	37	54	78	--	--	--	--	--	--	--
Chum	Historic	1985	48	26	22	21	62	85	--	--	--	--	--	--	--
Chum	Historic	1986	260	99	154	33	64	92	--	--	--	--	--	--	--
Chum	Historic	1987	17	9	8	51	71	90	--	--	--	--	--	--	--
Chum	Historic	1988	49	24	24	30	69	90	--	--	--	--	--	--	--
Chum	Historic	1989	5	2	3	40	50	58	--	--	--	--	--	--	--

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled			Mean Length (cm)	Maximum Length (cm)	Minimum Length (cm)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present	Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified	Fin Status	Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals										
Chum	Historic	1990	13	3	10	51	72	81	--	--	--	--	--	--	--
Chum	At-Sea CP	1991	3	1	2	54	62	73	5.60	5.60	--	--	--	--	--
Chum	At-Sea CP	1992	21	11	9	62	71	81	3.30	5.08	7.80	--	--	--	--
Chum	At-Sea CP	1993	5	2	3	36	44	65	--	--	--	--	--	--	--
Chum	At-Sea CP	1994	4	1	3	71	74	75	4.50	5.13	5.50	--	--	--	--
Chum	At-Sea CP	1995	11	4	7	36	47	74	0.55	2.01	5.60	--	--	--	--
Chum	At-Sea CP	1996	12	2	10	65	73	79	3.40	5.02	7.20	--	--	--	--
Chum	At-Sea CP	1997	4	2	2	40	52	70	0.80	1.78	3.60	--	--	--	--
Chum	At-Sea CP	1998	2	2	--	63	70	76	3.80	3.80	--	--	--	--	--
Chum	At-Sea CP	1999	17	9	8	41	71	85	3.34	4.79	9.11	--	--	--	--
Chum	At-Sea CP	2000	2	--	2	63	80	97	3.26	3.26	--	--	--	--	--
Chum	At-Sea CP	2001	20	10	10	48	64	78	2.73	3.75	6.76	--	--	--	--
Chum	At-Sea CP	2002	7	1	6	56	71	89	2.29	5.33	10.81	--	--	--	--
Chum	At-Sea CP	2003	4	2	1	60	65	69	2.24	3.57	4.54	--	--	--	--
Chum	At-Sea CP	2004	13	10	3	53	66	74	1.96	3.57	4.74	--	--	--	--
Chum	At-Sea CP	2005	5	3	1	44	63	69	--	--	--	--	--	--	--
Chum	At-Sea CP	2006	4	2	2	53	71	82	--	--	--	--	--	--	--
Chum	At-Sea CP	2007	44	31	11	39	66	79	--	--	--	--	--	--	--
Chum	At-Sea CP	2008	12	6	6	52	62	73	--	--	--	--	--	--	--
Chum	At-Sea CP	2010	2	1	1	58	61	63	--	--	--	--	--	--	--
Chum	At-Sea CP	2011	17	10	7	33	59	76	--	--	--	--	--	--	--
Chum	At-Sea CP	2012	21	12	9	63	70	79	--	--	--	--	--	--	--
Chum	At-Sea CP	2013	10	5	5	49	68	80	--	--	--	--	--	--	--
Chum	At-Sea CP	2015	3	--	3	59	65	69	--	--	--	--	--	--	--
Chum	At-Sea CP	2016	14	6	8	61	71	84	--	--	--	--	--	--	--
Chum	At-Sea MS	1991	2	2	--	72	76	79	--	--	--	--	--	--	--
Chum	At-Sea MS	1992	3	--	3	70	73	76	3.40	4.50	5.50	--	--	--	--
Chum	At-Sea MS	1993	1	--	1	73	73	73	4.80	4.80	4.80	--	--	--	--
Chum	At-Sea MS	1994	2	--	2	79	81	82	6.40	6.40	6.40	--	--	--	--
Chum	At-Sea MS	1995	39	14	25	31	56	77	2.40	4.05	6.00	--	--	--	--

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled				Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose		Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals	Fin Present						Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified	
Chum	At-Sea MS	1996	16	3	13	65	72	80	3.40	5.19	7.20	--	--	--
Chum	At-Sea MS	1997	7	2	4	59	64	68	2.60	2.93	3.50	--	--	--
Chum	At-Sea MS	1999	7	2	5	41	65	78	0.72	3.81	5.80	--	--	--
Chum	At-Sea MS	2000	2	--	2	63	66	69	3.37	3.95	4.52	--	--	--
Chum	At-Sea MS	2001	3	2	1	65	70	78	5.16	5.16	5.16	--	--	--
Chum	At-Sea MS	2002	4	1	3	75	79	82	4.60	6.11	7.61	--	--	--
Chum	At-Sea MS	2003	1	1	--	69	69	69	--	--	--	--	--	--
Chum	At-Sea MS	2004	11	6	5	56	67	73	2.22	3.61	4.66	--	--	--
Chum	At-Sea MS	2005	5	4	1	62	67	70	--	--	--	--	--	--
Chum	At-Sea MS	2006	28	14	14	56	74	85	--	--	--	--	--	--
Chum	At-Sea MS	2007	45	26	18	47	65	82	--	--	--	--	--	--
Chum	At-Sea MS	2008	10	3	7	64	68	73	--	--	--	--	--	--
Chum	At-Sea MS	2009	4	2	2	66	70	73	--	--	--	--	--	--
Chum	At-Sea MS	2010	2	1	1	60	60	60	--	--	--	--	--	--
Chum	At-Sea MS	2011	5	4	1	67	69	72	--	--	--	--	--	--
Chum	At-Sea MS	2014	1	--	1	72	72	72	--	--	--	--	--	--
Chum	At-Sea MS	2016	6	--	6	71	74	77	--	--	--	--	--	--
Chum	Tribal MS	1997	7	2	5	46	68	82	3.90	6.07	7.40	--	--	--
Chum	Tribal MS	1998	11	8	3	50	65	76	2.90	3.87	5.10	--	--	--
Chum	Tribal MS	1999	7	2	5	70	79	89	4.50	6.80	10.80	--	--	--
Chum	Tribal MS	2001	2	--	2	63	65	67	2.84	2.84	2.84	--	--	--
Chum	Tribal MS	2002	13	8	5	49	68	85	--	--	--	--	--	--
Chum	Tribal MS	2003	3	3	--	62	64	67	--	--	--	--	--	--
Chum	Tribal MS	2004	3	1	2	61	69	77	--	--	--	--	--	--
Chum	Tribal MS	2006	6	1	5	54	65	73	--	--	--	--	--	--
Chum	Tribal MS	2009	3	1	2	69	71	73	--	--	--	--	--	--
Chum	Tribal MS	2011	10	5	5	61	67	78	--	--	--	--	--	--
Coho	Historic	1980	38	14	17	47	58	73	--	--	--	--	--	--
Coho	Historic	1981	17	9	8	47	60	74	--	--	--	--	--	--
Coho	Historic	1982	122	43	45	33	59	105	--	--	--	--	--	--

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled			Female Individuals	Male Individuals	Unsex Individuals	Mean Length (cm)	Maximum Length (cm)	Minimum Length (cm)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present	Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified	Fin Status	Genetic Samples Taken
			Female	Male	Unsex													
Coho	Historic	1983	349	170	146	34	54	100	--	--	--	--	--	--	--	--	--	
Coho	Historic	1984	1067	509	556	25	52	79	--	--	--	--	--	--	--	--	--	
Coho	Historic	1985	252	124	114	26	58	80	--	--	--	--	--	--	--	--	--	
Coho	Historic	1986	1793	909	877	33	55	83	--	--	--	--	--	--	--	--	--	
Coho	Historic	1987	656	334	314	26	55	80	--	--	--	--	--	--	--	--	--	
Coho	Historic	1988	1538	609	917	27	52	79	--	--	--	--	--	--	--	--	--	
Coho	Historic	1989	94	45	49	43	54	67	--	--	--	--	--	--	--	--	--	
Coho	Historic	1990	40	21	19	33	56	89	--	--	--	--	--	--	--	--	--	
Coho	At-Sea CP	1991	40	21	18	30	53	84	--	--	--	--	--	--	--	--	--	
Coho	At-Sea CP	1992	14	10	3	47	64	77	1.40	2.74	4.90	--	--	--	--	--	--	
Coho	At-Sea CP	1993	3	2	1	45	48	50	--	--	--	--	--	--	--	--	--	
Coho	At-Sea CP	1994	2	1	1	43	47	50	1.70	1.70	1.70	--	--	--	--	--	--	
Coho	At-Sea CP	1995	9	5	4	50	61	76	7.40	7.40	7.40	--	--	--	--	--	--	
Coho	At-Sea CP	1996	27	15	12	55	73	96	2.00	6.99	9.80	--	--	--	--	--	--	
Coho	At-Sea CP	1997	14	12	2	49	56	84	1.30	2.58	9.20	--	--	--	--	--	--	
Coho	At-Sea CP	1998	1	1	--	74	74	74	--	--	--	--	--	--	--	--	--	
Coho	At-Sea CP	1999	8	3	5	46	60	79	1.16	2.88	6.76	--	--	--	--	--	--	
Coho	At-Sea CP	2000	33	16	17	43	56	69	1.10	2.45	4.03	--	--	--	--	--	--	
Coho	At-Sea CP	2001	15	7	8	46	62	74	1.45	3.80	6.30	--	--	--	--	--	--	
Coho	At-Sea CP	2002	19	11	8	47	58	81	1.50	3.21	5.30	--	--	--	--	--	--	
Coho	At-Sea CP	2004	1	1	--	56	56	56	1.93	1.93	1.93	--	--	--	--	--	--	
Coho	At-Sea CP	2005	73	36	28	46	55	90	--	--	--	--	--	--	--	--	--	
Coho	At-Sea CP	2006	1	--	1	68	68	68	2.86	2.86	2.86	0	1	0	--	--	--	
Coho	At-Sea CP	2007	50	17	24	42	54	70	0.85	1.82	2.66	2	27	0	--	--	--	
Coho	At-Sea CP	2008	1	--	1	62	62	62	--	--	--	--	--	--	--	--	--	
Coho	At-Sea CP	2012	5	2	3	48	51	54	1.22	1.84	3.32	7	1	0	--	--	--	
Coho	At-Sea CP	2014	4	4	--	50	57	68	1.39	2.16	3.80	1	3	0	--	--	--	
Coho	At-Sea CP	2015	2	1	1	52	56	59	1.41	1.97	2.52	2	0	0	--	--	--	
Coho	At-Sea CP	2016	1	--	1	67	67	67	2.66	2.66	2.66	1	0	0	--	--	--	
Coho	At-Sea MS	1991	16	9	7	32	58	78	--	--	--	--	--	--	--	--	--	

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled				Mean Length (cm)	Maximum Length (cm)	Minimum Length (cm)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present	Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified	Fin Status	Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals											
Coho	At-Sea MS	1992	13	9	4	47	55	65	1.90	2.20	2.60	--	--	--	--	--
Coho	At-Sea MS	1993	1	--	1	43	43	43	1.00	1.00	1.00	--	--	--	--	--
Coho	At-Sea MS	1994	14	8	6	32	50	72	1.10	3.10	4.40	--	--	--	--	--
Coho	At-Sea MS	1995	394	188	206	30	55	87	0.70	2.40	4.80	--	--	--	--	--
Coho	At-Sea MS	1996	2	1	1	66	74	82	2.50	2.50	2.50	--	--	--	--	--
Coho	At-Sea MS	1997	15	5	9	35	52	70	1.25	2.45	4.00	--	--	--	--	--
Coho	At-Sea MS	1998	1	--	1	51	51	51	1.70	1.70	1.70	--	--	--	--	--
Coho	At-Sea MS	1999	13	4	9	50	62	83	1.70	3.22	7.70	--	--	--	--	--
Coho	At-Sea MS	2001	19	9	10	36	54	65	1.44	2.10	2.89	--	--	--	--	--
Coho	At-Sea MS	2002	21	11	10	38	62	78	1.32	2.65	5.06	--	--	--	--	--
Coho	At-Sea MS	2003	1	1	--	61	61	61	--	--	--	--	--	--	--	--
Coho	At-Sea MS	2005	30	23	6	41	55	71	--	--	--	--	--	--	--	--
Coho	At-Sea MS	2006	11	4	7	44	56	62	2.62	2.62	2.62	0	1	0	--	--
Coho	At-Sea MS	2007	49	23	24	39	57	80	1.07	1.78	3.08	2	15	3	--	--
Coho	At-Sea MS	2008	5	1	4	46	55	61	1.34	1.34	1.34	1	0	0	--	--
Coho	At-Sea MS	2009	6	2	4	41	49	52	0.80	1.41	1.64	4	2	0	--	--
Coho	At-Sea MS	2011	3	1	2	46	50	53	1.13	1.44	1.61	1	2	0	--	--
Coho	At-Sea MS	2012	2	1	1	48	50	51	1.34	1.46	1.57	2	0	0	--	--
Coho	At-Sea MS	2013	3	2	1	55	64	70	1.84	3.33	4.38	3	0	0	--	--
Coho	At-Sea MS	2014	58	33	25	28	50	68	0.27	1.71	4.36	31	27	0	--	--
Coho	Tribal MS	1997	115	54	61	33	50	72	0.85	1.45	2.40	--	--	--	--	--
Coho	Tribal MS	1998	58	20	38	33	57	85	1.00	1.76	2.40	--	--	--	--	--
Coho	Tribal MS	1999	4	1	2	45	53	67	1.05	2.08	3.80	--	--	--	--	--
Coho	Tribal MS	2000	3	3	--	51	56	62	2.11	2.66	3.20	--	--	--	--	--
Coho	Tribal MS	2001	4	2	2	65	68	72	3.64	4.20	5.25	--	--	--	--	--
Coho	Tribal MS	2002	11	5	6	25	52	65	--	--	--	--	--	--	--	--
Coho	Tribal MS	2003	55	33	22	45	53	71	2.09	2.35	2.60	--	--	--	--	--
Coho	Tribal MS	2004	51	26	25	44	59	68	2.15	3.00	3.61	--	--	--	--	--
Coho	Tribal MS	2005	90	54	36	43	54	70	--	--	--	--	--	--	--	--
Coho	Tribal MS	2006	2	1	1	55	56	57	--	--	--	0	2	0	--	--

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled			Mean Length (cm)	Maximum Length (cm)	Minimum Length (cm)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose Fin Present	Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified	Fin Status	Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals										
Coho	Tribal MS	2007	3	2	1	56	62	67	3.70	3.80	3.90	2	0	0	--
Coho	Tribal MS	2009	2	2	--	40	59	77	0.31	3.11	5.91	2	0	0	--
Coho	Tribal MS	2010	2	2	--	59	60	60	2.18	2.40	2.62	3	2	2	--
Coho	Tribal MS	2011	7	6	1	55	57	59	1.66	2.26	2.58	--	--	--	--
Pink	Historic	1981	33	19	13	52	58	65	--	--	--	--	--	--	--
Pink	Historic	1983	91	38	53	40	52	74	--	--	--	--	--	--	--
Pink	Historic	1985	29	19	10	40	55	64	--	--	--	--	--	--	--
Pink	Historic	1987	80	32	48	41	52	69	--	--	--	--	--	--	--
Pink	Historic	1988	1	1	--	48	48	48	--	--	--	--	--	--	--
Pink	At-Sea CP	1991	8	5	3	37	42	45	--	--	--	--	--	--	--
Pink	At-Sea CP	1993	236	99	137	37	43	58	0.70	1.00	1.40	--	--	--	--
Pink	At-Sea CP	1995	163	90	73	31	39	45	0.50	0.70	0.90	--	--	--	--
Pink	At-Sea CP	1997	14	8	6	38	44	48	0.53	0.89	1.30	--	--	--	--
Pink	At-Sea CP	1999	61	15	44	24	45	53	0.62	1.02	1.70	--	--	--	--
Pink	At-Sea CP	2000	6	1	5	37	42	45	0.93	0.93	0.93	--	--	--	--
Pink	At-Sea CP	2001	29	10	19	41	50	68	0.84	1.41	2.16	--	--	--	--
Pink	At-Sea CP	2003	4	2	2	51	54	62	1.54	1.94	2.87	--	--	--	--
Pink	At-Sea CP	2005	20	9	11	42	46	54	--	--	--	--	--	--	--
Pink	At-Sea CP	2007	11	4	5	34	44	51	--	--	--	--	--	--	--
Pink	At-Sea CP	2011	5	3	2	46	49	52	--	--	--	--	--	--	--
Pink	At-Sea CP	2012	6	3	3	42	49	59	--	--	--	--	--	--	--
Pink	At-Sea CP	2013	13	4	9	41	47	54	--	--	--	--	--	--	--
Pink	At-Sea CP	2015	11	4	7	39	43	56	--	--	--	--	--	--	--
Pink	At-Sea MS	1991	2	--	2	28	39	49	--	--	--	--	--	--	--
Pink	At-Sea MS	1993	70	34	36	38	43	49	0.60	1.03	1.50	--	--	--	--
Pink	At-Sea MS	1994	11	6	5	37	50	59	1.30	3.33	6.80	--	--	--	--
Pink	At-Sea MS	1995	65	32	33	33	39	46	--	--	--	--	--	--	--
Pink	At-Sea MS	1997	11	3	8	37	43	47	0.53	1.03	2.00	--	--	--	--
Pink	At-Sea MS	1999	4	2	2	40	42	44	0.72	0.84	0.96	--	--	--	--
Pink	At-Sea MS	2001	14	3	11	42	50	58	1.22	1.52	1.70	--	--	--	--

Table 28 (continued). Summary of biological data for salmon species, separated by sector, collected by A-SHOP observers from 1980–2016.

Species	Sector	Year	Individuals Biologically Sampled				Mean Length (cm)	Maximum Length (cm)	Minimum Weight (kg)	Mean Weight (kg)	Maximum Weight (kg)	Individuals with Adipose			Genetic Samples Taken
			Female Individuals	Male Individuals	Unsex Individuals	Fin Present						Individuals with Adipose Fin Clipped	Individuals with Adipose Unspecified	Fin Status	
Pink	At-Sea MS	2003	1	1	--	41	41	41	--	--	--	--	--	--	--
Pink	At-Sea MS	2007	6	2	2	46	48	49	--	--	--	--	--	--	--
Pink	At-Sea MS	2009	1	--	1	46	46	46	--	--	--	--	--	--	--
Pink	At-Sea MS	2011	1	--	1	46	46	46	--	--	--	--	--	--	--
Pink	At-Sea MS	2013	2	1	1	44	46	48	--	--	--	--	--	--	--
Pink	Tribal MS	1997	185	95	90	35	50	59	1.00	1.31	1.85	--	--	--	--
Pink	Tribal MS	1999	37	23	14	40	50	56	1.00	1.59	2.10	--	--	--	--
Pink	Tribal MS	2003	939	501	438	36	52	62	1.51	1.88	2.56	--	--	--	--
Pink	Tribal MS	2005	130	64	66	43	51	63	--	--	--	--	--	--	--
Pink	Tribal MS	2011	143	64	79	43	52	60	--	--	--	--	--	--	--
Sockeye	Historic	1981	1	--	1	64	64	64	--	--	--	--	--	--	--
Sockeye	Historic	1982	1	--	1	44	44	44	--	--	--	--	--	--	--
Sockeye	Historic	1983	4	2	1	36	50	57	--	--	--	--	--	--	--
Sockeye	Historic	1984	34	17	17	28	53	80	--	--	--	--	--	--	--
Sockeye	Historic	1985	11	5	6	58	67	81	--	--	--	--	--	--	--
Sockeye	Historic	1986	12	7	5	42	58	73	--	--	--	--	--	--	--
Sockeye	Historic	1987	7	3	4	60	66	82	--	--	--	--	--	--	--
Sockeye	At-Sea CP	1993	3	1	2	43	43	43	0.83	0.94	1.00	--	--	--	--
Sockeye	At-Sea CP	2000	1	1	--	49	49	49	1.45	1.45	1.45	--	--	--	--
Sockeye	At-Sea CP	2010	1	--	1	48	48	48	--	--	--	--	--	--	--
Sockeye	At-Sea MS	1995	3	1	2	40	42	44	--	--	--	--	--	--	--
Sockeye	At-Sea MS	2001	1	1	--	43	43	43	--	--	--	--	--	--	--
Sockeye	At-Sea MS	2016	3	--	3	47	54	59	--	--	--	--	--	--	--

Table 29. Observed salmon bycatch in the historic at-sea hake fishery.

Year	Fleet Hake		Chinook		Chum		Coho		Pink		Sockeye		Unspecified		Steelhead	
	Landings (mt)	Individuals	Weight (mt)	Individuals												
1980	30732	3338	9.20	16	0.04	46	0.11	--	--	--	--	1329	2686.91	--	--	--
1981	34729	4561	11.23	11	0.05	42	0.11	1	0.01	47	0.13	150	438.27	11	0.02	
1982	62338	17544	44.30	4829	7.92	423	1.06	4	0.01	--	--	62	224.78	3	0.00	
1983	64664	4505	9.73	44	0.09	872	1.64	8	0.01	204	0.39	3	3.45	--	--	
1984	88612	4252	7.63	455	0.99	2254	3.86	58	0.12	--	--	61	131.56	--	--	
1985	76992	1677	6.04	70	0.24	271	0.80	14	0.06	42	0.09	6	18.59	--	--	
1986	145278	36370	60.10	593	1.58	3773	8.21	10	0.02	--	--	204	407.20	1	0.00	
1987	149386	12001	30.70	29	0.14	1143	2.57	10	0.04	122	0.23	249	669.91	--	--	
1988	149754	12043	28.17	72	0.33	2470	4.69	--	--	1	0.00	18	60.34	--	--	
1989	200066	8333	22.52	12	0.02	177	0.36	--	--	--	--	17	64.26	--	--	
1990	169732	7813	17.66	31	0.17	99	0.18	--	--	--	--	92	207.91	2	0.01	
1991	205863	5564	20.73	10	0.05	130	0.34	20	0.02	--	--	4	11.24	--	--	
1992	154782	4208	14.61	42	0.20	237	0.67	--	--	--	--	6	33.88	--	--	
1993	98044	4995	12.61	63	0.17	16	0.02	2785	2.77	106	0.10	144	129.69	--	--	
1994	179853	3609	8.78	180	0.67	26	0.04	41	0.09	--	--	33	100.39	--	--	
1995	102310	8853	22.69	161	0.34	1432	3.08	1962	1.47	5	0.00	911	1170.88	--	--	
1996	128006	1616	7.56	164	0.79	75	0.39	--	--	--	--	2431	6443.48	--	--	
1997	146011	4168	11.13	145	0.35	313	0.57	583	0.74	--	--	45	93.29	--	--	
1998	145207	3758	12.77	37	0.14	136	0.38	5	0.01	--	--	11	38.95	--	--	
1999	140892	9629	28.84	296	1.64	86	0.26	542	0.74	--	--	5	42.03	--	--	
2000	120929	8309	21.95	17	0.09	81	0.18	20	0.02	2	0.00	20	49.91	--	--	
2001	100503	3379	9.27	57	0.19	106	0.29	321	0.54	3	0.00	315	910.09	--	--	

References

- Somers, K. A., M. A. Bellman, J. E. Jannot, Y.-W. Lee, J. McVeigh, and V. Tuttle. 2015. Observed and estimated total bycatch of salmon in the 2002–2013 U.S. West Coast fisheries. West Coast Groundfish Observer Program. National Marine Fisheries Service, NWFSC, 2725 Montlake Blvd E., Seattle, WA 98112.
- Somers, K. A., J. E. Jannot, V. Tuttle, N. B. Riley, and J. McVeigh. 2017. Estimated discard and catch of groundfish species in the 2016 U.S. West Coast fisheries. NOAA Fisheries, NWFSC Observer Program, 2725 Montlake Blvd E., Seattle, WA 98112.